AIRCRAFT ACCIDENT IDENTIFICATION NO.

2 02 27 102

RECORDS CODE SHEET
SNO 4535, (Rev. 1-62)

NAVAL AVIATION SAFETY CENTER

GENERAL (Card No. 1)

Field	Entry	Col.
Bureau Number	1 4 5 3 9 6	16-21
Reporting Custodian	1 3 2	22-24
Type of Duty	2 1	25-26
Major Command	1	27
Aircraft Damage	A	28
Aircraft Injury	E	29
Maneuver prior to Accident	M	30
First Accident type	A 1	31-32
First Accident phase	4 3 1	33-35
Second Accident type	9 4	36-37
Second Accident phase	A 2	38-40
Type of Operation	3	41-42
Contributing Cause Factors	1	43-47
Pilot Factor, First	F 6	48-49
Pilot Factor, Second	L 4	50-51
Pilot Factor, Third	C 9	52-53
First other Personnel Factor		54-55
Second other Personnel Factor		56-57
Primary Major Material Factor		58
Secondary Major Material Factor		59
Design		60
Facilities		61
Special Data & Cond.	S W 8 G J	62-68
Type of Flight Hazard		69
Pri. Cause/~~Accident or Pirates or Gremlins~~	1	70
Causal Fac for Pri-Cause	F 6	71-72
Carrier Hull Number		73-74
No Personnel Card ("R")		80

SUPPLEMENTARY (Card No. 2)

Field	Entry	Col.
Weather		16-21
Kind of Flight	1 A 1	22-24
Relative Wind - Direction		25
Relative Wind - Velocity		26
Relative Wind (Old Code - Not in Use)		27
Clearance	2	28
Time of Day	2	29
Number of other Aircraft	1	30
Altitude of Occurrence	2 7 ø	33-35
POSSIBLE FACTORS: Contributing Cause Factors		36-37
POSSIBLE FACTORS: Pilot Factor		38-39
POSSIBLE FACTORS: Other Personnel Factor		41-42
POSSIBLE FACTORS: Major Material Factor		43
POSSIBLE FACTORS: Design		44
POSSIBLE FACTORS: Facilities		45
POSSIBLE FACTORS: Weather		46
Non-Navy Injury ("R")		47
Number of "A" or "L" or "M" Injury		48-49
Number of "B" Injury		50-51
Number of "C" Injury		52-53
Number of "D" Injury		54-55
Number of "E" Injury	ø 2	56-57
Location	A S E L C T R	62-68
Facility Data		69-74

ACCIDENT DAMAGE: A (9)

ACCIDENT INJURY: E (10)

FISCAL YEAR: 2 (75)

I.D. NO. (Don't Count / Enemy Action / Other Aircraft): 2 ø 2 2 7 1 ø 2 (YR, MO, DAY, TYP, SEQ); F 8 W 1 (Model, 11-15)

SPECIAL ATTN: ("X"): X

Model Code: 1 7 (76, 77)

IBM: The above Fields are to be punched in all Coded Cards

PERSONNEL STATISTICS
(Card No. 3)

File Number → ø 7 8 2 7 3 (16 17 18 19 20 21)

Name (b) (6) [redacted]

Col.	32	35	37	40	42	46	47	48	51	52-53	55	56-57	58-59	62-63	65-66	68	69-70	71-72	73-74
Entry	5	6	A	1	A	1	E	2	1	ø3	2	ø3	ø3	øø	øø		18	ø2	22

Name (16 17 18 19 20 21)
File Number →

IBM: PERSONNEL CODED ON REVERSE SIDE ☐

CODED: [signature] REVIEWED: [initials] LOGGED: [initials] PUNCHED: [initials] VERIFIED: ______ REVIEWED: [initials] REPUNCHED: ______

CODE SHEET REVIEWED BY CLASS DESK ANALYST ______ (Initials) ______ (Date)

RECORDS CODE SHEET
SHD 4535 (Rev. 1-62)

NAVAL AVIATION SAFETY CENTER

GENERAL (Card No. 1)

Field	Entry	Columns
Bureau Number	1 4 6 9 7 5	16-21
Reporting Custodian	1 3 2	22-24
Type of Duty	2 1	25-26
Major Command	1	27
Aircraft Damage	A	28
Aircraft Injury	E	29
Maneuver prior to Accident	L	30
First Accident type	A 1	31-32
First Accident phase	4 3 1	33-35
Second Accident type	6 8	36-37
Second Accident phase	A 2	38-40
Type of Operation	3	41-42
Contributing Cause Factors	2	43-47
Pilot Factor, First		48-49
Pilot Factor, Second		50-51
Pilot Factor, Third		52-53
First other Personnel Factor	H 6	54-55
Second other Personnel Factor		56-57
Primary Major Material Factor		58
Secondary Major Material Factor		59
Design		60
Facilities		61
Special Data & Cond.	8 G J	62-68
Type of Flight Hazard		69
Pri. Cause/Avoidable Inc. or Flt Haz or Gr Acd't		70
Causal Fac for Pri-Cause		71-72
Carrier Hull Number		73-74
No Personnel Card ("R")		80

SUPPLEMENTARY (Card No. 2)

Field	Entry	Columns
Weather		16-21
Kind of Flight	1 A 1	22-24
Relative Wind - Direction		25
Relative Wind - Velocity		26
Relative Wind (Old Code - Not in Use)		27
Clearance	2	28
Time of Day	2	29
Number of other Aircraft	1	30
Altitude of Occurrence	2 7 Ø	33-35
POSSIBLE FACTORS / Contributing Cause Factors		36-37
POSSIBLE FACTORS / Pilot Factor		38-39
POSSIBLE FACTORS / Other Personnel Factor		41-42
POSSIBLE FACTORS / Major Material Factor		43
POSSIBLE FACTORS / Design		44
POSSIBLE FACTORS / Facilities		45
POSSIBLE FACTORS / Weather		46
Non-Navy Injury ("R")		47
Number of "A" or "L" or "M" Injury		48-49
Number of "B" Injury		50-51
Number of "C" Injury		52-53
Number of "D" Injury		54-55
Number of "E" Injury		56-57
Location	A S E L C T R	62-68
Facility Data		69-74

ACCIDENT DAMAGE: A (9)
ACCIDENT INJURY: E (10)
FISCAL YEAR: 2 (75)

I.D. NO. (Don't Count / Enemy Action / Other Aircraft): R — 2 Ø 2 2 7 1 Ø 2 (YR, MO, DAY, TYP, SEQ)

F 8 W 2 (11-15, Model)

SPECIAL ATTN: ("X") X

Model Code: 9 8 (76-77)

IBM: The above Fields are to be punched in all Coded Code

PERSONNEL STATISTICS (Card No. 3)

File Number → 6 4 1 3 2 7 (16-21)

Name: [redacted] (22-31)

	Rank/Rate	Br Service	Age	Yrs Experience	Status	Position	(m) to (ed)	Abandon A/C	Pilot Factor Involved	Trainer Utilization	Instr. Card	Total Time All Models	All Models 3 Months	All Series This Model	All Ser Mod 3 Months	CV Landings	Instrument Hours	Nite Hours	Total Time Jet
03	5	2	5	1	A	1	E	2	2	Ø2	2	Ø3	Ø2	ØØ	ØØ		Ø1	ØØ	31
Columns	32	33	37	40	42	45	47	49	51	52-53	55	56-57	58-59	62-63	65-66	68	69-70	71-72	73-74
04																			

Name (16 17 18 19 20 21)
File Number →

IBM: PERSONNEL CODED ON REVERSE SIDE ☐

CODED [signature] REVIEWED [signature] LOGGED [signature] PUNCHED [signature] VERIFIED ____ REVIEWED ____ REPUNCHED ____

CODE SHEET REVIEWED BY CLASS DESK ANALYST ______ (Initials) ______ (Date)

A&R DEPARTMENT CODE SHEET

☐ Don't Count

☒ Other Aircraft

75	76	77	78	79
2	1	7	6	2

Year	Month	Day	Type Occurrence Sequence	Damage	Injury	Model Aircraft
2	0	2	2 7	1	0 2	A E F 8 2 1

Bureau Number: 1 4 5 3 9 6

NARRATIVE BODY

DURING RDZV #4 HAD TROUBLE KEEPING FLIGHT IN SIGHT DUE SUN GLARE. SLID V SIDE TO SIDE V BELOW ATTEMPTING JOIN RATE OF CLOSURE EXCESSIVE. PULL UP ± TO RIGHT OF FORM. CRANKED IN 60 DEG BANK TO STOP RELATIVE MOTION. A/C CONT ROLL WHEEL STUCK HI, BOTH EJT ← 27M/300. TEKWEEK

Prepared by _____ Reviewed _____ Punched _____ Verified _____

Note to IBM: Route code sheet to Open File upon completion of Brief Cards

APR 04 1962

U. S. NAVAL AVIATION SAFETY CENTER
U. S. NAVAL AIR STATION
NORFOLK 11, VIRGINIA

NASC/111/ees
Ser: 1113
22 May 1962

SPECIAL HANDLING REQUIRED IN ACCORDANCE
WITH PARAGRAPH 70, OPNAVINST P3750.6D

From: Commander, U. S. Naval Aviation Safety Center
To: Commanding Officer, Fighter Squadron ONE TWO FOUR

Subj: VF-124 AAR ser 2-62 concerning F8U-2, BuNo 146975, and F8U-1, BuNo 145396, accident occurring 27 February 1962, pilots [redacted] (b) (6)

1. The subject report and all endorsements thereon have been reviewed. The Naval Aviation Safety Center concurs with the comments and recommendations of the Aircraft Accident Board as modified by subsequent endorsers.

2. The cause of this accident has been recorded by the Center indicating the pilot [redacted] (b) (6) as the single contributing factor.

[redacted] (b) (6)

By direction

Copy to:
BUWEPS (C-13) (2)
CMC (CODE AAP)
CINCPACFLT
COMFAIRSDIEGO
CGFIRSTMAW
CGTHIRDMAW
CO, MAG 33
CO, NAS MIRAMAR
CO, VF-174
CO, LIGHTPHOTORON 63
BUWEPSREP DALLAS
COMCVG-12
COMNAVAIRPAC

4

FF4-1/3750
Ser 80/ 2983

SPECIAL HANDLING REQUIRED IN ACCORDANCE
WITH PARAGRAPH 70, OPNAVINST 3750.6D

5 APR 1962

FOURTH ENDORSEMENT on FITRON 124 AAR ser 2-62 concerning F8U-1/F8U-2 BUNOS 145396/146975 accident occurring 27 February 1962 pilots 1stLT (b) (6) and LTJG (b) (6)

From: Commander Naval Air Force, U. S. Pacific Fleet
To: Commander, U. S. Naval Aviation Safety Center

Subj: FITRON 124 AAR ser 2-62

1. Forwarded, concurring generally in the comments and recommendations of the Aircraft Accident Board as modified by the first endorser.

a. The recommendation contained in paragraph 3 of the AAR will be the subject of an NAVAIRPAC Safety Bulletin and an agenda item for area safety council meetings.

b. The recommendation in paragraph 4 of the basic correspondence is strongly concurred in. Standardization of placement of the survival knife on the pilots equipment is considered a must in the interest of reducing injuries sustained by pilots during ejection through snagging of the knife and in the interest of locating the knife or an acceptable shroud cutter so as to be accessable at all times.

2. The following administrative errors are noted:

a. The reporting custodian did not state when the last aircraft accident prevention survey established by COMNAVAIRPACINST 3750.42 was held.

b. The reporting custodian did not state whether COMNAVAIRPAC Report Symbol 3750.1 would be submitted.

c. Reporting custodian did not state whether any NATOPS Procedure was violated or whether any changes should be promulgated.

3. For purposes of safety awards this accident is administratively charged to FITRON 124.

(b) (6)

By direction

FF4-1/3750

SPECIAL HANDLING REQUIRED IN ACCORDANCE
WITH PARAGRAPH 70, OPNAVINST 3750.6D

Copy to:
BUWEPS (C-13)
COMNAVAVNSAFECEN (2) (Airmail)
CNO (CODE AAP)
CINCPACFLT
COMFAIRSDIEGO
COFIRSTMAW
COTHIRDMAW
CO MAG 33
CO NAS MIRAMAR
CO FITRON 124, 174
CO LIGHTPHOTORON 63
BUWEPS REP DALLAS

FF7/3750
Serial:
80/ 609

MAR 2 8 1962

SPECIAL HANDLING REQUIRED IN ACCORDANCE
WITH PARAGRAPH 70, OPNAVINST 3750.6D

THIRD ENDORSEMENT on VF-124 AAR ser 2-62 concerning F8U-1/F8U-2 BuNo's 145396/146975 accident occurring 27 February 1962, Pilots 1/LT (b) (6) and LTJG (b) (6)

From: Commander Fleet Air San Diego/Naval Air Bases, ELEVENTH Naval District
To: Commander, U.S. Naval Aviation Safety Center
Via: Commander Naval Air Force, U.S. Pacific Fleet

Subj: VF-124 Aircraft Accident Report ser 2-62 of 27 February 1962; forwarding of

1. Forwarded, concurring in the comments and recommendations of the Aircraft Accident Board and in the remarks contained in the subsequent endorsements.

(b) (6)

CHIEF OF STAFF

Copy to:
NAVAVSAFCEN
BUWEPS
CINCPACFLT
CMC (Code AAP)
BUWEPSREP DALLAS
CO, NAS MIRAMAR
1st, 3rd MAW
CO, VF-124
CO, VF-174
CO, VFP-63
MAAG-33
COMCVG-12

6

21

ORIGINAL

CO VF-12/10:jrl
3750
Ser: 00/ 474
23 MAR 1962

SPECIAL HANDLING REQUIRED IN ACCORDANCE
WITH PARAGRAPH 70 OF OPNAV INST 3750.6D

SECOND ENDORSEMENT on VF-124 AAR 2-62 concerning F8U-1/F8U-2 Bu No's 145396/146975 accident occurring 27 February 1962, Pilots 1/LT (b) (6) and LTJG (b) (6)

From: Commander Carrier Air Group TWELVE
To: Commander U.S. Naval Aviation Safety Center
Via: (1) Commander Fleet Air San Diego
(2) Commander Naval Air Force, U. S. Pacific Fleet.

Subj: VF-124 Aircraft Accident Report 2-62; forwarding of

1. Forwarded, concurring with the comments and recommendations of the Aircraft Accident Board and the first endorser.

Paul F. Stevens
PAUL F. STEVENS

Copy to:
NAVANSAFECEN (2)
BUMEPS
CINCPACFLT
COMNAVAIRPAC
COMFAIRSDIEGO
CNC (Code AAP)
BUMEPSREP DALLAS
CO, NAS MIRAMAR
1st, 3rd MAW
CO, VF-124
VF-174, VFP-63, MAAG-33

ORIGINAL

ORIGINAL

VF-124:20:abf
3750
Ser 274
15 March 1962

SPECIAL HANDLING REQUIRED IN ACCORDANCE
WITH PARAGRAPH 70, OPNAVINST 3750.6D

FIRST ENDORSEMENT on VF-124 AAR 2-62 concerning F8U-1/F8U-2, BUNO 145396/146975, accident occurring 27 February 1962, Pilots 1/LT (b) (6)
LTJG (b) (6)

From: Commanding Officer, Fighter Squadron ONE TWO FOUR (VF-124)
U. S. Naval Air Station, Miramar 45, California
To: Commander, Naval Aviation Safety Center
Via: (1) Commander, Carrier Air Group TWELVE
(2) Commander, Fleet Air San Diego
(3) Commander, Naval Air Force, U. S. Pacific Fleet

Subj: VF-124 Aircraft Accident Report 2-62; forwarding of

1. Forwarded, concurring with the comments and recommendations of the Aircraft Accident Board except as follows:

a. Comment b. lists limited experience as a contributing factor in this accident but neglects to mention that other trainees of this replacement squadron are capable of effecting the rendezvous maneuver safely at the same experience level.

2. Marine Corps trainees are received in this command without any previous record of flight performance. Consequently, these pilots are closely observed by VF-124 instructor pilots for any weaknesses which would forecast such an unsatisfactory performance as was demonstrated in this accident. Unfortunately, no weakness sufficient to warrant investigative action had been demonstrated by this pilot prior to the accident. Action has already been taken to obtain flight performance jackets for Marine Corps pilots.

3. The prompt evasive action of the flight leader in all probability prevented the destruction of four aircraft instead of two in this accident.

W. J. McVEY

Copy to:
COMNAVAVSAFCENT (2cc direct Air Mail)
BUWEPS (1cc direct Air Mail)
CINCPACFLT
COMNAVAIRPAC
COMFAIRSDIEGO
CMC (Code AAP)
COMCARAIRGRU TWELVE
BUWEPSREP DALLAS
CO, NAS MIRAMAR
1ST & 3RD MAW
VF-174, VFP-63, MAAG-33

19

8

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH PARA 70, OPNAVINST 3750.6D

AIRCRAFT ACCIDENT REPORT
OPNAV FORM 3750-1 (Rev. 12-59) PAGE 1

SPECIAL HANDLING REQUIRED in accordance with Para. 65, OPNAV INSTRUCTION 3750.6C

ORIGINAL

PART I - GENERAL

SECTION A - IDENTIFICATION

1. A/C ACCIDENT BOARD APPOINTED BY: Commanding Officer, Fighter Squadron-124
2. DATE OF ACCIDENT: 27 FEB 1962 — TIME (LST): 1704
3. SERIAL NUMBER: AAR 2-62

4. Commander,
TO: U.S. Naval Aviation Safety Center

5. ENCLOSURES (1) MOR (Original only)
(2) Pilot's Statement
(3) Pilot's Statement
(4) Flight Leader's Statement
(5) Flight Member's Statement
(6) Photo Fuselage NJ-433
(7) Photo Fuselage NJ-408
(8) Photo Vertical Fin NJ-408
(9) (See attached sheet)

6. VIA (1) Commanding Officer, FITRON 124
(2) Commander, Carrier Air Group TWELVE
(3) Commander, Fleet Air San Diego
(4) Commander, Naval Air Force, U.S. PacFlt
(5)
(6)

7. REPORTING CUSTODIAN (if different than item 1. above): NA
8. ACTIVITY OPERATING A/C (if different than item 7.): NA

9. KIND OF FLIGHT: 1A1
10. TIME OF DAY: ☐ DAWN ☒ DAY ☐ DUSK ☐ NIGHT
11. LOCATION OF ACCIDENT: Lat 33° 16'N Long 116° 22'W Borrego Springs
12. ELEVATION ABOVE SEA LEVEL: 27,000

13. PLACE OF LAST TAKE-OFF: Touch & Go at MCAAS Yuma
14. CLEARED FROM NAS Miramar TO NAS Miramar

15. TYPE CLEARANCE: ☐ IFR ☒ VFR ☐ DVFR ☒ LOCAL ☐ OPERATIONAL ☐ AIRWAYS ☐ DIRECT ☐ OTHER (Specify)

16. TIME IN FLIGHT: 01+41
17. TYPE ACCIDENT: A-1, 6-8 Collision between aircraft in air, ejection
18. PHASE OF FLIGHT: 4 in flight

A/C
19. MODEL: F8U-2
20. SERIAL NO.: 146975
21. DAMAGE TO A/C: ☒ A ☐ B ☐ C ☐ D ☐ E ☐ F
22. DOLLAR COST: 999,000
23. AIRSPEED (KIAS): 300
24. A/C WEIGHT: 20,000

25. LIST MODEL, SERIAL NO., REPORTING CUSTODIAN AND DAMAGE CLASSIFICATION OF ANY OTHER A/C INVOLVED (Complete an OPNAV FORM 3750-1 for each A/C involved)
F8U-1 145396 VF-124 A

1. NAME (Last, first and middle initials)	2. RANK/RATE	3. FILE/SER. NO.	4. DESIG.	5. COMPONENT	6. AGE	7. TYPE OF INJURY	8. BILLET	9. POSITION	10. INSTR. CARD
PILOT (at controls at time of accident) [redacted]	LTJG	[redacted]	1315	USNR	24	1	Pilot	Pilot	E
CO-PILOT									

SECTION B - PERSONNEL DATA

PERSONNEL		8. OFT - OPERATIONAL FLIGHT TRAINER AVAILABLE	OFT USED	9. CPT - COCKPIT PROC. TRAINER AVAILABLE	CPT USED	10. UNIT TO WHICH PERSONNEL ARE ATTACHED	11. TYPE INSTRUMENT CARD
PILOT	YES	X	X	X	X	VF-124	☒ STANDARD ☐ SPECIAL
	NO						
CO-PILOT	YES						☐ STANDARD ☐ SPECIAL
	NO						

12. PILOT EXPERIENCE

ITEM		PILOT	CO-PILOT	ITEM	PILOT	CO-PILOT
ALL MODELS		353		CV LANDINGS DAY/NIGHT	12	
ALL MODELS IN LAST 12 MONTHS		251		FCLP LANDINGS DAY/NIGHT	89	
ALL MODELS IN LAST 3 MONTHS		21		INSTRUMENT HOURS LAST 3 MONTHS	1.1	
ALL SERIES THIS MODEL (item 19)	A/C	9.5		NIGHT HOURS LAST 3 MONTHS	0	
	OFT / CPT	2/1				
ALL SERIES THIS MODEL LAST 12 MONTHS	A/C	9.5		TOTAL HELO. HRS (Helo AAR Only)	NA	
	OFT / CPT	2/1		TOTAL JET HOURS (Jet AAR Only)	315	
ALL SERIES THIS MODEL LAST 3 MONTHS	A/C			LAST FLIGHT, ALL SERIES THIS MODEL — DATE	26 FEB 1962	
	OFT / CPT			DURATION	1.8	

13. OTHERS

NAME (Last, first and middle initials)	DNA	RANK/RATE	FILE/SERVICE NO	ORG. TO WHICH ATTACHED	TYPE OF INJURY	BILLET	PERSON TYPE
1. NA							
2.							
3.							
4.							
5.							

SPECIAL HANDLING REQUIRE IN ACCORDANCE WITH PARA 70, OPNAVINST 3750.6D

9

AIRCRAFT ACCIDENT REPORT

5. WEATHER

1. CEILING	2. VISIBILITY	3. RELATIVE WIND (SEE INST 5)	4. TEMPERATURE	5. DEW POINT	6. ALTIMETER SETTING
0	35	290M REL/ 10 KTS	OAT 52 RUNWAY 52	30	30.11

7. OTHER WEATHER CONDITIONS (winds aloft, icing levels, sea state, etc., if pertinent to accident)

CAVU at altitude - weather not a factor

6. CONTRIBUTING FACTORS

✓	FACTOR	✓	FACTOR	✓	FACTOR
	PILOT		LANDING SIGNAL OFFICER		MATERIAL FAILURE OR MALFUNCTION
	CREW	X	OTHER PERSONNEL (Specify) Mid-Air Collision Victim		DESIGN
	SUPERVISORY PERSONNEL		ADMINISTRATIVE		ROLLING AND PITCHING DECK/ ROUGH SEAS
	MAINTENANCE PERSONNEL		AIRPORT OR CARRIER FACILITIES		UNDETERMINED
	SERVICING PERSONNEL		WEATHER		OTHER (Specify)

E. DEPLOYMENT

FOR ACCIDENTS ABOARD DEPLOYED CARRIER (Complete following Section on Pilot)

1. DATE DEPLOYED	2. DAY - HOURS/LANDINGS LOGGED SINCE DEPLOYED	3. DAY - HOURS/LANDINGS LOGGED LAST 30 DAYS
NA	NA	NA
4. INSTRUMENT HRS. LOGGED SINCE DEPLOYMENT	**5. NIGHT - HOURS/LANDINGS LOGGED SINCE DEPLOYED**	**6. NIGHT - HOURS/LANDINGS LOGGED LAST 30 DAYS**
NA	NA	NA

PART II - MAINTENANCE, MATERIAL AND FACILITIES DATA

SECTION A - AIRCRAFT AND ENGINE DATA

1 A/C HISTORY

	DATE OF MANUFACTURE	SERVICE TOUR	MONTHS IN THIS TOUR	TOTAL NO OF OVERHAULS	FLIGHT HRS. SINCE LAST OVERHAUL	FLIGHT HRS. SINCE ACCEPTANCE	TYPE CHECK LAST PERFORMED	FLIGHT HOURS SINCE LAST CHECK	NO. OF DAYS SINCE LAST CHECK
	1-29-60	2	5	1	251.1	686.2	Intermediate	104.3	39

2 ENGINE HISTORY

	DATE OF MANUFACTURE	ENGINE MODEL	ENGINE SERIAL NO.	TOTAL NO OF OVERHAULS	FLIGHT HRS. SINCE LAST OVERHAUL	FLIGHT HRS. SINCE ACCEPTANCE	TYPE CHECK LAST PERFORMED	FLIGHT HOURS SINCE LAST CHECK	NO. OF DAYS SINCE LAST CHECK
1	6-1-59	J-57-P16	P631364	3	234.4	798.2	Major	104.3	39
2									
3									
4									

3 GENERAL

a. DID FIRE OCCUR? ☐ BEFORE ACCIDENT ☒ AFTER ACCIDENT ☐ DID NOT OCCUR

b. DID EXPLOSION OCCUR IN FLIGHT? ☐ YES ☒ NO

c. CHECK IF APPLICABLE ☐ AMP FUR SERIAL

d. HAS DIR BEEN REQUESTED? ☐ YES ☒ NO

e. FAILED COMPONENTS INVOLVED: None

4 MAINT. FACTORS

CHECK ITEMS PRESENT IN THIS ACCIDENT

a. ☐ A/C DESIGN
b. ☐ A/C EQUIPMENT
c. ☐ MAINTENANCE
d. ☐ UNDETERMINED
e. ☐ TECHNICAL INSTRUCTION
f. ☐ OTHER (Specify) ....
g. ☐ SURFACE FACILITIES
h. ☐ HUMAN ENGINEERING (e.g., Cockpit configurations, etc.)

5 OTHER DATA

a. ALTITUDE AT MALFUNCTION	b. AIR SPEED	c. OPERATING TEMP	d. WEIGHT OF A/C	e. C.G. (% MAC)	f. KIND OF FUEL	g. FUEL PRESSURE
NA	NA Kts	NA	NA	NA	NA	NA

h. EVIDENCE OF FUEL CONTAMINATION: NA

i. CAUSE OF ENGINE FAILURE OR FLAMEOUT: NA

j. FUEL CONTROL REGULATOR/CARBURETOR (List mark and ser. nos., give time since new or overhauled): NA

k. EXTERNAL STORES ABOARD A/C: NA

(If additional space is necessary, attach additional sheets)

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH PARA 70, OPNAVINST 3750.6D

10

OPNAV FORM 3750-1 (Rev 12-59) PAGE 3

AIRCRAFT ACCIDENT REPORT

OPNAV REPORT 3750-1

PART II — MAINTENANCE, MATERIAL AND FACILITIES DATA (Cont'd)

SECTION B — FACILITIES DATA

1. GENERAL. If BASIC FACILITIES INVOLVED, DESCRIBE EFFECT ON ACCIDENT IN THE ANALYSIS SECTION OF THE REPORT

	a. CLEARANCE AUTHORITY		i. WATER LANDING AREA		q. CRASH AND RESCUE
	b. FLIGHT PLANNING INFORMATION SOURCE		j. APPROACH ZONE		r. SEARCH AND RESCUE
	c. LANDING AIDS (GCA, CCA, ILS, etc.)		k. END ZONE (Over run)		s. CATAPULT
	d. TRAFFIC CONTROL TOWER (Field or Ship)		l. SHOULDERS		t. ARRESTING GEAR (Carrier)
	e. APPROACH AND ENROUTE AIDS TO NAVIGATION		m. TAXIWAY NA		u. BARRIER OR BARRICADE (Field or Ship)
	f. RUNWAY WATCH		n. PARKING AREA		v. FLIGHT DECK
	g. LANDING SIGNAL OFFICER		o. EMERGENCY ARRESTING GEAR (Runway)		w. MIRROR
	h. RUNWAY		p. A/C SERVICING, HANDLING AND DIRECTING (Field or Ship)		x. OTHER (Specify) None

2. SHIPS DATA

a. EQUIPMENT INVOLVED: ☐ CATAPULT ☐ ARRESTING GEAR | b. PRESSURE SETTINGS | c. WIND OVER DECK | d. RELATIVE HEADWIND | e. APPROACH SPEED (GATH - 12 READING)

f. MARK NUMBER | g. MODEL NUMBER | h. LOCATION ON SHIP | i. LAUNCHING BRIDLE AND CONFIGURATION USED

j. CATAPULT / ARRESTING GEAR BULLETINS OR NOMOGRAMS USED

A. THIS PORTION SHALL BE COMPLETED WHENEVER (1) A MAJOR AIRCRAFT ACCIDENT INVOLVES ARRESTING GEAR, BARRIER AND/OR BARRICADE EQUIPMENT, OR (2) AN AIRCRAFT ACCIDENT INVOLVES MALFUNCTIONING OF ARRESTING GEAR, BARRIER AND/OR BARRICADE EQUIPMENT. MINOR ACCIDENTS OR ROUTINE DAMAGE TO CABLES, WEBBINGS AND OTHER EXPENDABLE COMPONENTS NEED NOT BE REPORTED.

ENGAGED	DECK RUNOUT (FT)	RAM TRAVEL (IN)	CONTROL VALVE SETTINGS: CONSTANT PRESSURE DOME (P.S.I.)	CONSTANT PRESSURE RATIO	CONSTANT RUNOUT (WT LBS)	ACCUMULATOR PRESSURE (PSI)	COMMENTS (For cable failure specify number of landings and months in service)
DECK PENDANT	NA						
DECK PENDANT							
BARRIER							
BARRIER							
BARRICADE							

PART	SECTION	ITEM	PART III REMARKS (Continue on additional sheets)
I	A	5	See attached sheet for enclosures and distributions

COPY DISTRIBUTION:
JCC, NAVAIRSAFECEN DIRECT (AM)
JCC, BUWEPS DIRECT (AM)
1cc CINCPACFLT
1cc COMNAVAIRPAC
1cc COMFAIRSDIEGO
1cc CMC (Code AAP)
1cc COMCVG TWELVE
1cc BUWEPSREP DALLAS
1cc CO NAS Miramar
1cc 1st. 3rd MAW

COST DAMAGE TO: GOVERNMENT PROPERTY $ None | PRIVATE PROPERTY Preliminary estimate $5000.00 | DATE SUBMITTED TO C.O. 12 March 1962

SIGNATURES OF THE BOARD

SENIOR MEMBER (b) (6) LCDR, USN, Administrative Officer, UNIT BILLET

MEMBER (b) (6) USN, Power Plants Officer, UNIT BILLET

(b) (6) LT, (MC) USNR

MEMBER (b) (6) USN, UNIT BILLET

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH PARA 70, OPNAVINST 3750.6D

AIRCRAFT ACCIDENT REPORT
OPNAV FORM 3750-1 (Rev. 12-59) PAGE 4

SPECIAL HANDLING REQUIRED in accordance with Para. 65, OPNAV INSTRUCTION 3750.6C

OPNAV REPORT 3750-1

PART I - GENERAL

SECTION A - IDENTIFICATION

1. A/C ACCIDENT BOARD APPOINTED BY: Commanding Officer, Fighter Squadron 124	2. DATE OF ACCIDENT: 27 FEB 1962	TIME (LZT): 1704U	3. SERIAL NUMBER: AAR 2-62
4. TO: Commander, U.S. Naval Aviation Safety Center	5. ENCLOSURES: (1) (See other sheet) (2) (3) (4) (5) (6) (7) (8) (9)		
6. VIA: (1) Commanding Officer, FITRON 124 (2) Commander, Carrier Air Group TWELVE (3) Commander, Fleet Air San Diego (4) Commander, Naval Air Force, U.S. PacFlt (5) (6)			
7. REPORTING CUSTODIAN (if different than item 7. above): Same	8. ACTIVITY OPERATING A/C (if different than item 7.): Same		
9. KIND OF FLIGHT: 1A1	10. TIME OF DAY: ☐ DAWN ☒ DAY ☐ DUSK ☐ NIGHT	11. LOCATION OF ACCIDENT: Lat 33° 16'N Long 116° 22'W Borrego Springs	12. ELEVATION ABOVE SEA LEVEL: 27,000 ft
13. PLACE OF LAST TAKE-OFF: Touch and Go at MCAAS Yuma	14. CLEARED: FROM NAS Miramar TO NAS Miramar		
15. TYPE CLEARANCE: ☐ IFR ☒ VFR ☐ DVFR ☒ LOCAL ☐ OPERATIONAL ☐ AIRWAYS ☐ DIRECT ☐ OTHER (Specify)			
16. TIME IN FLIGHT: 01+41 Min	17. TYPE ACCIDENT: A-1, 6-8	Collision between A/C in air, ejection	18. PHASE OF FLIGHT: 4 in flight
A/C 19. MODEL: F8U-1	20. SERIAL NO.: 145396	21. DAMAGE TO A/C: ☒ A ☐ B ☐ C ☐ D ☐ E ☐ F	22. DOLLAR COST: 1,109,000
23. AIRSPEED (K.I.A.): 300	24. A/C WEIGHT: 19,500#		
25. LIST MODEL, SER. NR, REPORTING CUSTODIAN AND DAMAGE CLASSIFICATION OF ANY OTHER A/C INVOLVED (Complete on OPNAV FORM 3750-1 for each A/C involved): F8U-2 146975 VF-124 A			

SECTION B - PERSONNEL DATA

1. NAME (Last, first and middle initials)	2. RANK/RATE	FILE/SER. NO.	DESIGNATOR/RATING	5. AGE	6. TYPE OF A/C QUAL	7. BILLET	8. POSITION	9. INJURY CODE
PILOT (at time of accident): (b) (6)	LT USMCR	(b) (6) 7398	USMCR	29	1	Pilot	Pilot	E
CO-PILOT								

PERSONNEL		8. OFT - OPERATIONAL FLIGHT TRAINER: AVAILABLE	8. OFT - OPERATIONAL FLIGHT TRAINER: USED	9. CPT - COCKPIT PROC. TRAINER: AVAILABLE	9. CPT - COCKPIT PROC. TRAINER: USED	10. UNIT TO WHICH PERSONNEL ARE ATTACHED	11. TYPE INSTRUMENT CARD
PILOT	YES	X	X	X	X	VF-124	☒ STANDARD ☐ SPECIAL
	NO						
CO-PILOT	YES						☐ STANDARD ☐ SPECIAL
	NO						

PILOT EXPERIENCE IN HOURS

12. ITEM		PILOT	CO-PILOT	ITEM	PILOT	CO-PILOT
ALL MODELS		395		CV LANDINGS DAY/NIGHT	12	
ALL MODELS IN LAST 12 MONTHS		231		FCLP LANDINGS DAY/NIGHT	127	
ALL MODELS IN LAST 3 MONTHS		31		INSTRUMENT HOURS LAST 3 MONTHS	18	
ALL SERIES THIS MODEL (Item 19)	A/C	9		NIGHT HOURS LAST 3 MONTHS	2	
	OFT / CPT	3/3				
ALL SERIES THIS MODEL LAST 12 MONTHS	A/C	9		TOTAL HELO. HRS. (Helo. AAR Only)	NA	
	OFT / CPT	3/3		TOTAL JET HOURS (Jet AAR Only)	225	
ALL SERIES THIS MODEL LAST 3 MONTHS	A/C			LAST FLIGHT, ALL SERIES THIS MODEL: DATE	26 FEB 1962	
	OFT / CPT			HOURS (This A/C)	1.3	

13. NAME (Last, first and middle initials)	DNA	RATE	FILE/SERVICE NO.	ORG. TO WHICH ATTACHED	INJURY CODE	BILLET	POSITION
1. NA							
2.							
3.							
4.							
5.							

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH PARA 70, OPNAVINST 3750.6D

AIRCRAFT ACCIDENT REPORT

6. WEATHER

1. CEILING	2. VISIBILITY	3. RELATIVE WIND (SEE INST'S)	4. TEMPERATURE	5. DEW POINT	6. ALTIMETER SETTING
Clear	35	290° REL, 10 KTS	OAT 52, RUNWAY 52	30	30.11

7. OTHER WEATHER CONDITIONS (winds aloft, icing levels, sea state, etc. if pertinent to accident)

CAVU at altitude weather not a factor

8. CONTRIBUTING FACTORS

✓	FACTOR	✓	FACTOR	✓	FACTOR
X	PILOT		LANDING SIGNAL OFFICER		MATERIAL FAILURE OR MALFUNCTION
	CREW		OTHER PERSONNEL (Specify)		DESIGN
	SUPERVISORY PERSONNEL		ADMINISTRATIVE		ROLLING AND PITCHING DECK/ ROUGH SEAS
	MAINTENANCE PERSONNEL		AIRPORT OR CARRIER FACILITIES		UNDETERMINED
	SERVICING PERSONNEL		WEATHER		OTHER (Specify)

E. DEPLOYMENT — FOR ACCIDENTS ABOARD DEPLOYED CARRIER (Complete following Section on Pilot)

1. DATE DEPLOYED	2. DAY - HOURS/LANDINGS LOGGED SINCE DEPLOYED	3. DAY - HOURS/LANDINGS LOGGED LAST 30 DAYS
NA		
4. INSTRUMENT HRS. LOGGED SINCE DEPLOYMENT	**5. NIGHT - HOURS/LANDINGS LOGGED SINCE DEPLOYED**	**6. NIGHT - HOURS/LANDINGS LOGGED LAST 30 DAYS**

PART II - MAINTENANCE, MATERIAL AND FACILITIES DATA

SECTION A - AIRCRAFT AND ENGINE DATA

1. A/C HISTORY

	DATE OF MANUFACTURE	SERVICE TOUR	MONTHS IN THIS TOUR	TOTAL NO. OF OVERHAULS	FLIGHT HRS SINCE LAST OVERHAUL	FLIGHT HRS SINCE ACCEPTANCE	TYPE CHECK LAST PERFORMED	FLIGHT HOURS SINCE LAST CHECK	NO. OF DAYS SINCE LAST CHECK
	7-23-58	3	13	2	402.1	943.3	Intermediate	73.8	53
2. ENGINE HISTORY		ENGINE MODEL	ENGINE SERIAL NO						
1	2-25-57	J57-P4A	P608170	1	204.3	650.8	Intermediate	73.8	53
2									
3									
4									

3. GENERAL

a. DID FIRE OCCUR? ☐ BEFORE ACCIDENT ☒ AFTER ACCIDENT ☐ DID NOT OCCUR

b. DID EXPLOSION OCCUR IN FLIGHT? ☐ YES ☒ NO

c. CHECK IF APPLICABLE ☐ AMP FUR RECEIVAL

d. HAS DIR BEEN REQUESTED? ☐ YES ☒ NO

e. FAILED COMPONENTS INVOLVED: None

4. MAINT AND ENG FACTORS — CHECK ITEMS PRESENT IN THIS ACCIDENT

a. ☐ A/C DESIGN
b. ☐ A/C EQUIPMENT
c. ☐ MAINTENANCE
d. ☐ UNDETERMINED
e. ☐ TECHNICAL INSTRUCTION
f. ☐ OTHER (Specify) ....
g. ☐ SURFACE FACILITIES
h. ☐ HUMAN ENGINEERING (e.g., Cockpit configurations, etc.)

5. OTHER DATA

a. ALTITUDE AT MALFUNCTION	b. AIR SPEED	c. OPERATING TEMP	d. WEIGHT OF A/C	e. C.G. (% MAC)	f. KIND OF FUEL	g. FUEL PRESSURE
NA	NA Kts.	NA	NA	NA	NA	NA

h. EVIDENCE OF FUEL CONTAMINATION	i. CAUSE OF ENGINE FAILURE OR FLAMEOUT
NA	NA

j. FUEL CONTROL REGULATOR/CARBURETOR (List stock and ser. nos., give time since new or overhauled)	k. EXTERNAL STORES ABOARD A/C
NA	NA

(If additional space is necessary, attach additional sheets)

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH PARA 70, OPNAVINST 3750.6D

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PAGE 6

AIRCRAFT ACCIDENT REPORT

OPNAV REPORT 3750-1

PART II — MAINTENANCE, MATERIAL AND FACILITIES DATA (Cont'd)

SECTION B — FACILITIES DATA

1. GENERAL ✓ BASIC FACILITIES INVOLVED. DESCRIBE EFFECT ON ACCIDENT IN THE ANALYSIS SECTION OF THE REPORT

	a. CLEARANCE AUTHORITY		i. WATER LANDING AREA		q. CRASH AND RESCUE
	b. FLIGHT PLANNING INFORMATION SOURCE		j. APPROACH ZONE		r. SEARCH AND RESCUE
	c. LANDING AIDS (GCA, CCA, ILS, etc.)		k. END ZONE (Over run)		s. CATAPULT
	d. TRAFFIC CONTROL TOWER (Field or Ship)		l. SHOULDERS		t. ARRESTING GEAR (Carrier)
	e. APPROACH AND ENROUTE AIDS TO NAVIGATION		m. TAXIWAY		u. BARRIER OR BARRICADE (Field or Ship)
	f. RUNWAY WATCH		n. PARKING AREA		v. FLIGHT DECK
	g. LANDING SIGNAL OFFICER		o. EMERGENCY ARRESTING GEAR (Runway)		w. MIRROR
	h. RUNWAY		p. A/C SERVICING, HANDLING AND DIRECTING (Field or Ship)		x. OTHER (Specify) None

a. EQUIPMENT INVOLVED: ☐ CATAPULT ☐ ARRESTING GEAR	b. PRESSURE SETTINGS	c. WIND OVER DECK	d. RELATIVE HEADING	e. APPROACH SPEED (SPN 12 READING)

f. MARK NUMBER	g. MODEL NUMBER	h. LOCATION ON SHIP	i. LAUNCHING BRIDLE AND CONFIGURATION USED

j. CATAPULT / ARRESTING GEAR BULLETINS OR NOMOGRAMS USED

2. SHIPS DATA

k. THIS PORTION SHALL BE COMPLETED WHENEVER (1) A MAJOR AIRCRAFT ACCIDENT INVOLVES ARRESTING GEAR, BARRIER AND/OR BARRICADE EQUIPMENT OR (2) AN AIRCRAFT ACCIDENT INVOLVES MALFUNCTIONING OF ARRESTING GEAR, BARRIER AND/OR BARRICADE EQUIPMENT. MINOR ACCIDENTS OR ROUTINE DAMAGE TO CABLES, WELDINGS AND OTHER EXPENDABLE COMPONENTS NEED NOT BE REPORTED.

ENGAGED	DECK RUNOUT (FT)	RAM TRAVEL (IN)	CONTROL VALVE SETTINGS: CONSTANT PRESSURE — DOME (P.S.I.)	CONTROL VALVE SETTINGS: CONSTANT PRESSURE — RATIO	CONTROL VALVE SETTINGS: CONSTANT RUN OUT (WT LBS.)	ACCUMULATOR PRESSURE (PSI)	COMMENTS (for cable failure specify number of landings and months in service)
DECK PENDANT	NA						
DECK PENDANT							
BARRIER							
BARRIER							
BARRICADE							

PART III REMARKS (Continue on additional sheets)

PART	SECTION	ITEM	REMARKS	COPY DISTRIBUTION
1	A	5	See other sheet	2CC NAVAVNSAFECEN DIRECT 1CC BUWEPS DIRECT See other sheet

COST DAMAGE TO:	GOVERNMENT PROPERTY	PRIVATE PROPERTY	DATE SUBMITTED TO C.O.
	$ None	See other sheet	12 March 1962

PART IV - SIGNATURES OF THE BOARD

SENIOR MEMBER [redacted] LCDR, USN
Administrative Officer UNIT BILLET

MEMBER [redacted] USN
Safety Officer UNIT BILLET

[redacted] LT (MC) USNR

MEMBER [redacted] USN
UNIT BILLET

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SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH PARA 70, OPNAVINST 3750.6D

PART V - THE ACCIDENT

At approximately 1525 uniform on 27 February 1962, LTJG (b) (6) and 1/LT (b) (6) took off from NAS Miramar as number 2 and 3 men of a scheduled four plane formation training flight. The flight leader was LT (b) (6) and the number 4 man was 1/LT (b) (6). The flight progressed in a normal manner through "finger four", instrument parade, break-up and rendezvous and tactical wing maneuvers. During the course of the tactical wing practice, some swapping of positions in the flight occurred so that as the flight finally joined in parade prior to entering the break for touch and go practice at MCAAS Yuma, the order became LT (b) (6) (1), LTJG (b) (6) (2), 1/LT (b) (6) (4) and 1/LT (b) (6) (3). After a break-up and two touch and go landings at MCAAS Yuma, LT (b) (6) directed the flight to make a running rendezvous enroute to Miramar via El Centro. LTJG (b) (6) joined on the starboard wing in parade, and then LT (b) (6) advised 1/LTs (b) (6) and (b) (6) that the rendezvous point would be on the 290° radial of El Centro at 30 miles.

After reaching the designated rendezvous point, LT (b) (6) proceeded to purge his wing fuel tank, hoping the remaining fuel vapor would attract attention and facilitate the rendezvous. He also noticed that the flight was closing a restricted area and again changed the rendezvous point to the 290° radial of El Centro at 40 miles. After reaching this point, he set up a standard port orbit and after about 80° of turn 1/LT (b) (6) joined the flight in right echelon, then moved over to the port wing. After approximately 180° of turn, 1/LT (b) (6) sighted the #3 man (1/LT (b) (6) at the 5 O'clock position. At this time 1/LT (b) (6) broadcast, "Roger, have you".

1/LT (b) (6) passed under the formation, to the inside of the turn. He states that he was having some difficulty keeping the flight in sight due to the setting sun. He maneuvered back and forth across and behind the formation in an attempt to minimize the sun glare and close the formation from astern. The last time he attempted to move across from left to right, he began to slide to the outside and was slightly behind the formation. He rolled into a steep left bank in an effort to stop the lateral relative motion. He inadvertantly continued the roll to an inverted position and struck LTJG (b) (6) aircraft on the right side.

LTJG (b) (6) felt his aircraft pitch nose down and attempted to move his controls. Feeling no response, he elected to eject and pulled the face curtain. At the same time, 1/LT (b) (6) felt his aircraft begin a spinning motion and attempted anti-spin control procedures. He then heard LT (b) (6) transmitting, "Get out of it! Get out of it now!" and ejected. 1/LT (b) (6) experienced some difficulty in pulling the face curtain all the way and finally lunged forward in the seat to pull the curtain. The seat then fired normally and performed according to specification.

Prior to these events, LT (b) (6) had seen an aircraft on his starboard side, inverted, and had pulled up and banked sharply to the left to avoid collision. As he looked back, he saw the fuselage of one airplane, minus the entire wing, nose down below him. He immediately transmitted, "Get out of it! Get out of it now!" and the pilot of the wingless aircraft ejected. He then observed two parachutes descending and, in addition, the fire from an aircraft crash in the area north of Borrego Springs.

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He switched to Emergency IFF and transmitted "MAYDAY" on guard.

Both pilots descended normally in their parachutes and landed in open desert country near Borrego Springs, California. They were picked up by civilians and taken to Borrego Springs county airport, then flown to NAS Miramar by Coast Guard UF. Both pilots were examined at the NAS Miramar dispensary and found uninjured.

The two aircraft impacted in uncontrolled flight in four major sections near the town of Borrego Springs. The entire wing of NJ-408, the fuselage of NJ-408, the starboard wing of NJ-433, and the fuselage and port wing of NJ-433 were the major subsections. Both canopies and both ejection seats fell in the general area.

A secondary power line was severed and a vineyard was damaged by the fuselage of NJ-408. No other damage and no personal injury was incurred.

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PART VI - DAMAGE TO THE AIRCRAFT

Both aircraft sustained Alfa damage as a result of the mid-air collision and subsequent impact with the ground.

A. The inflight damage consisted of:

(1) Complete separation of the entire wing from the fuselage of NJ-408. The right wing tip was bent upwards sharply for a distance of approximately two feet. The wing was torn loose from the pivot lugs and the wing incidence cylinder.

(2) The aft portion of the top of the vertical fin of NJ-408 was broken off. A portion of metal from the right wing of NJ-433 was found imbedded high on the right side of the vertical fin of NJ-408. The dorsal fin was torn just forward of the vertical fin, and there were numerous fluorescent red paint marks on the right side of NJ-408 above the UHT.

(3) The right wing of NJ-433 was bent down at the tip approximately two feet. The starboard wing had separated from the main body of the wing just outboard of the flap, approximately two feet from the fuselage. The entire outboard leading edge droop had been torn away from the wing and was not recovered.

B. The crash damage consisted of:

(1) Massive impact and fire damage to the fuselages of both aircraft from aft of the cockpit to just aft of the wing pivot fitting bulkhead. The cockpits and tail sections were recognizable but severely crushed. Fire broke out on impact and gutted the entire center section of both aircraft. There was no evidence of an inflight fire in either aircraft.

(2) The separated wing of NJ-408 and the starboard wing of NJ-433 sustained little damage due to ground impact. No fire broke out in either wing.

The aircraft have been turned over to COMNABS Eleventh Naval District for salvage.

PART VII - THE INVESTIGATION

The location of the three known portions of the crash was verified by the Safety Officer in an aircraft the morning following the accident. The entire accident board then drove to the scene of the accident. The crash was apparently located in three separate areas, however superficial investigation revealed the possibility of a missing starboard wing from NJ-433. Impending darkness curtailed a detailed examination until the following morning. Investigation of the wreckage of NJ-433 the following morning verified the fact that the starboard wing was indeed missing. An aerial search the same afternoon located the missing wing. The accident board arrived at the crash site the next morning and completed the preliminary investigation. The aircraft was then released to salvage.

The fuselages of both aircraft were destroyed by fire from the wing pivot fitting rib forward to the aft bulkhead of the cockpit. (Encl: 6-7) The wing of NJ-408 though completely separated from the aircraft, was in relatively good condition as were the two sections of the wing from NJ-433. No evidence of inflight fire was discovered.

The wing tips and vertical fins of both aircraft were painted with high visibility red paint. The national star insignias are located in the conventional spots, i. e., on both sides of the fuselage aft of the cockpit, the lower surface of the starboard wing, and upper surface of the port wing.

Red paint marks were discovered on the starboard side of the vertical fin and dorsal fin of NJ-408. (Encl: 8) Severe inflight damage was detected on the dorsal fin. (Encl: 9) A piece of metal, foreign to the rudder structure and identified as wing structure, was discovered in the vertical fin of NJ-408. The rear portion of the top of the vertical fin of NJ-408 sustained inflight damage. (Encl: 10) The red paint marks, the damage to the vertical and dorsal fins and the piece of wing metal indicate that a collision between the wing of NJ-433 and the tail area of NJ-408 occurred in flight.

The starboard wing tip of NJ-408 was bent up by a collision inflight. This fact was verified by ground scars. The ground scar was caused by the wing of NJ-408 striking the ground leading edge first with the starboard half making initial contact. The resulting ground scar is in the form of a narrow, straight trough with a 60° curve approximately two feet from the starboard end. (Encl: 11) This substantiates the conclusion that the starboard wing tip was, in fact, bent upward prior to impact with the ground. The starboard wing tip of NJ-408 had red white and blue paint marks on the curled up portion. These marks had to come from the star insignia on the fuselage of NJ-433. The paint marks and ground collision marks indicate a collision between the fuselage (in the area of the star insignia) of NJ-433 and the wing tip of NJ-408.

The port wing of NJ-433 was virtually intact and showed no evidence of inflight damage (Encl: 12).

The starboard wing experienced extensive damage to the wing tip and leading edge which could have only occurred in flight. This statement is corroborated by the fact that no metal fragements were found in the wing impact area (Encl: 13) and red paint marks were found on the starboard wing. (Encl: 14) The damage to the leading edge therefore occurred inflight.

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Although the wing of NJ-408 was practically intact the starboard droop and the starboard flap were missing. The droop was subsequently discovered at a location remote from the impact area. The missing droop and flap verify inflight damage to the starboard wing of NJ-408.

The starboard wing hinge pivot fitting of NJ-408 failed as a result of a load imposed on the rear of the starboard wing. (Encl: 15) The wing actuating rod failed due to shear loads imposed by counter-clock wise rotation of the wing about the aircraft yaw axis (Encl: 16) The port wing hinge pivot fitting remained intact, but the rotation of the wing tore the rib supporting the fitting out of the aircraft as the wing separated completely from the fuselage.

The damage to the leading edge of the starboard wing of NJ-433, the paint marks on the wing, the sequence of wing support failure, and the damage to the trailing edge of the starboard wing of NJ-408 indicate the collision of the starboard wing of NJ-433 with the trailing edge of the starboard wing of NJ-408. The concentration of damage on the starboard side of both aircraft establishes the fact that NJ-433 was inverted at the moment of collision.

Initial impact was probably the fuselage of NJ-433 against the wing tip of NJ-408 (Encl: 17). NJ-433 was in a near inverted position, rolling left and ascending. The second impact was between the starboard wing tip of NJ-433 and the tail area of NJ-408, with NJ-433 in an inverted attitude and over taking NJ-408. (Encl: 18) The third and disabling impact was between the leading edge of the starboard wing of NJ-433 and the trailing edge of the starboard wing of NJ-408. (Encl: 19) This blow probably caused the wing of NJ-408 to separate from the fuselage and simultaneously break off the starboard wing of NJ-433 at the junction of the flap and the aileron. The simultaneous failure of both wings is substantiated by the wreckage distribution. The more dense portions of the wreckage, (fuselages of NJ-408 and NJ-433), were located to the north west. The entire wing of NJ-408 was located approximately 1½ air miles south east of the fuselage while the starboard wing of NJ-433 was located 2½ miles to the south east. The wreckage should be distributed along a north-west, south-east line, if the separation of the pieces occurred simultaneously, since the wind at altitude was from the north west. The wreckage distribution does lie about this line and thus verifies the theory that all pieces separated at nearly the same instant. (Encl: 20).

DATA CONCERNING THE PILOTS

1/LT (b) (6) is TAD to VF-124 for training in the F8U and is scheduled for an 80 hour syllabus in the aircraft. He had completed six familiarization flights and one formation flight prior to the flight in question for a total of 9 hours in the aircraft. This flight was to be his second formation flight. During these flights, (b) (6) had received a total of twelve below average marks out of a total of 73 grades. Ten of these below average grades concerned his performance in PAM stage. These were mainly given for below average handling of the aircraft in the landing pattern. The last two below average marks were given on his first formation flight and were; (1) "Lost flight as number #2 man in a CV break up and rendesvous "(2)" Flys too far aft of bearing and overlaps wings in parade".

On the hop during which the collision occurred, the instructor commented that on two practice rendezvous (b) (6) had over-shot to the outside, was acute with a high closure rate, and that he had flown rough parade after the initial joinup.

LTJG (b) (6) is attached to VF-124 as a Fleet Replacement Pilot scheduled for the 100 hour syllabus in the aircraft. He had previously flown eight flights in the aircraft for a total of 9.5 hours. These flights included six completed FAM flights, one incomplete FAM flight, and one instrument flight. He had received eight below average marks out of a total of 102 grades in his previous flights. All below average marks were for poor handling of the aircraft in the landing pattern.

Both pilots had received the normal course of ground school instruction which includes a one week NAMD course and approximately eight days of lectures presented by squadron instructors. These first intensive days are then followed by half day flight and half day ground school. Specific lectures given both pilots prior to this accident included (1) Normal flight procedures (2) inflight emergencies (3) Spin recovery techniques (4) Basic formation in the F8U, and a thorough briefing and physical checkout on the Martin-Baker ejection seat. A considerable amount of the formation lecture is devoted to the importance of smooth flying and avoiding high closure rates in proximity to other aircraft.

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PART VIII - ANALYSIS

In analyzing this accident it must be assumed that the primary cause factor was pilot technique aggrivated by lack of experience and impaired visibility due to the position of the sun.

A. Personnel Factors:

The pilots involved in the accident displayed average progress through the syllabus to this point. It is common for most inexperienced students to have some difficulty in becoming accustomed to the handling characteristics of the F8U in the landing pattern, and for this reason, the board attaches little importance to the sub-par performance of 1/LT (b) (6) and LTJG (b) (6) in the landing pattern. 1/LT (b) (6) had received below average grades on his formation one for rendezvous technique and for losing sight of the flight. During the flight in question he made two practice rendezvous that resulted in an acute position with a high rate of closure. At the time of the accident neither pilot had accumulated enough time in the aircraft to display any tendencies or trends. The instance of 1/LT (b) (6) losing the formation the previous flight is not unusual, and neither are acute rendezvous in early stages of the formation syllabus. The board considered these adverse grades to be so common for inexperienced pilots that they were properly regarded as no cause for excessive alarm prior to the accident.

B. Supervisory Factors:

There were no supervisory factors contributing to the cause of this accident. Both pilots had received ground school lectures commensurate with their stage in the flight syllabus. The entire flight had been briefed one hour prior to take-off by the flight leader, LT (b) (6). LT (b) (6) is the squadron Standardization Officer, and enjoys a well deserved reputation for thorough briefing techniques and precise execution of the flight syllabus. The only area of supervisory factor open to discussion is the establishment of the rendezvous circle in such a position that the sun was a factor. At 1700 during this time of year in California, the sun is extremely low on the southwestern horizon. It is considered that all members of the flight were exposed to the same hazards of sun blindness. It would have been impossible to establish a rendezvous circle which did not involve sun blindness in some sectors; therefore, the board concludes that although the sun may have been a factor in 1/LT (b) (6) erratic gyrations and losing sight of the formation, it is not a matter of supervisory error. 1/LT (b) (6) conclusion that he was in a normal spin was a natural one for a pilot at his stage of training. He attempted anti-spin procedures not realizing his starboard wing was missing. He had not completed the anti-spin procedures when LT (b) (6) broadcast his order to "Get out of it". This message was actually meant for LTJG (b) (6) who had lost his radio as his entire wing separated, but was immediately complied with by 1/LT (b) (6) however, under the circumstances that later developed, the order to eject was in the best interest of all concerned. The fact that the starboard wing was missing was not substantiated until approximately 36 hours after the accident.

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The flight was briefed and conducted in accordance with the approved VF-124 flight syllabus and the applicable portions of the NATOPS manual.

C. Material Failure or Malfunction:

The board considers that material malfunction or failure was not a factor in this accident.

In an effort to conclusively rule out control malfunction, both yaw packages were examined, bench tested, and found, excluding the crash damage, to function properly. Neither aircraft has any record of control malfunctions in either roll or yaw. Unfortunately, both roll packages were destroyed by fire and no tests could be performed. Neither pilot, however, complained of any control malfunction during the flight prior to the accident.

Although the members of the board have a combined F8U flight time of over 1500 hours, no member of the board has ever experienced, or has ever talked to, or heard of, any F8U pilot who has ever been subjected to any uncontrollable inputs from the roll stabilization systems. One member has extensive maintenance experience with the F8U in two squadrons. A common roll stab failure consists of the roll stab shutting itself off in conditions of heavy turbulence, jet wash, or snap manouvers. A more common failure of the stabilization systems consists of yaw oscillations of varying degree which can be corrected by turning off the yaw stab. In this case, both yaw stabilization packages performed properly excluding crash damage, on a bench test after the accident.

The board takes issue with the statement contained in enclosure (2) pertaining to the hydraulic pressure within the PC-systems. Handbook limitations indicate an upper limit of 3200 PSI. Over pressure in this case however, is not deemed a cause factor of poor or erratic flight control response.

The board therefore concludes that all control movements in both aircraft were made by the pilots, and that the stabilization systems were operating properly at the time of collision. Both the aircraft were in good mechanical condition with no outstanding discrepancies. Both aircraft had been properly pre-flighted and "signed off" by qualified plane captains. All applicable service changes pertinent to this accident were installed.

D. Facilities:

All facilities of NAS Miramar, the Coast Guard Air Station, San Diego, and various radar facilities in the area were utilized in an expeditious and professional manner. There are no cause factors or discrepancies under facilities. HU-1 at NAAS Roam Field provided invaluable assistance in search and transportation for the accident board.

E. Personnel Equipment, Survival Equipment:

Both pilots were dressed in accordance with the latest VF-124 Instructions and applicable survival bulletins, i.e., helmet with Hardiman fittings and chin strap, orange flight suit, Z-3 cutaway G suit, torso harness, flight gloves and high top shoes.

Martin-Baker F-5 seats were installed in both aircraft and apparently functioned properly. An inspection of both seats, canopies, and the remains of the cockpits was conducted. No reason for 1/LT (b) (6) statement that the canopy of his aircraft fired early was found to exist. The canopy of 1/LT (b) (6) aircraft was recovered intact with no plexiglass broken, which tends to eliminate the possibility that the canopy fractured on contact with LTJG (b) (6) aircraft and caused the windblast 1/LT (b) (6) describes in his statement. The board considers that the most probable cause of 1/LT (b) (6) difficulty in pulling the curtain was the high transverse G forces that he was subjected to in the rapidly rotating aircraft after the right wing failed. 1/LT (b) (6) also complained that the drogue gun piston was flailing around as he rode the chute down and that it struck him several times. 1/LT (b) (6) helmet had several gouges across the back where the drogue gun piston had evidently struck the helmet. Numerous other AARs have stated that this piston does indeed swing back and forth in close proximity to the head of the man in the chute, and the West Coast Martin-Baker representative confirmed this fact. Most pilots have cut the piston off if it got in the way. This was the action followed by 1/LT (b) (6). The drogue gun line must be retained at its present length in order for the seat to function properly, however, the piston presents a definite mental and physical hazard to a pilot in the descending parachute.

Both pilots had seat packs with the AN/PRT-3 UHF transmitter beacon installed in accordance with BUWEPS aviation clothing and survival bulletin 39-60. The PRT in 1/LT (b) (6) aircraft was hooked up completely and functioned normally. Due to the squadron's not having received and completely installed all of the PRT-3 components in all aircraft, the PRT-3 in LTJG (b) (6) aircraft was inoperative. The PRT-3 is set to operate as the pilot separates from the seat at an attitude of 10-13,000 feet and operates continously on 243.0 MCS until shut off, or the battery runs dead. The PRT-3 in 1/LT (b) (6) aircraft functioned so efficiently that guard channel was unusable until it was shut off. The length of time that the PRT-3 was audible to remote ground stations was compromised due to the fact that ejection occurred over mountainous terrain, however, it was monitored by numerous local ground stations within a radius of 75-100 miles.

Both pilots released their seat packs at altitudes of 100-200 feet. This is in accordance with squadron survival training which recommends this maneuver over land in order to minimize leg injury on landing.

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PART IX - COMMENTS

The cause factors of this accident were:

a. 1/LT (b) (6) in losing sight of the flight leader and the rendezvous group, was inadvertently placed in a very poor position from which to execute a rendezvous. His maneuvers to gain the number 4 position in the flight were erratic and were hampered to some extent by the position of the sun. His last attempt to effect rendezvous resulted in an extremely high closure rate between his aircraft and the rendezvous group. In an attempt to reduce the relative motion 1/LT (b) (6) increased his bank markedly, became disoriented, and rolled into inverted flight. While in an inverted and ascending attitude, 1/LT (b) (6) rolled up and into the starboard wing tip of NJ-433. Pilot factor is determined as the primary cause of this accident.

b. Limited experience as a pilot of high performance aircraft is considered a contributing factor. 1/LT (b) (6) had only 8.5 hours in type.

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PART X - RECOMMENDATIONS

1. Pilots should be continually appraised of the hazards involved in an improperly executed rendesvous. The necessity of properly assesing the closure rate by keeping all aircraft in sight cannot be over-stressed. The pilot's statement attests to a poor scan pattern and lack of reference to the horizon which resulted in a phenomenum similiar to "Target fixation". Pilot briefing must continually emphasise the insidious dangers which may arise during the rendesvous maneuver.

2. It is recommended that the PRT-3 beacon should be installed so as to actuate upon ejection rather than separation from the seat. This would allow ground stations extra time in which to take fixes on the parachuting pilots. In cases where the parachute descent is into mountainous territory, which is common on the West Coast; the time between chute opening at 10-13000 feet, and descent below line of sight UHF range would be so short as to preclude an adequate fix on the position of the pilot.

3. It is recommended that the Martin-Baker CO. investigate the possibility of disposing of, or otherwise safetying the swinging drogue gun piston after main parachute deployment. 1/LT (b) (6) s helmet had several gouges in the rear which indicated that the drogue gun piston was potentially capable of causing serious injury to an unprotected head. It is further recommended that the potential danger of the swinging drogue gun piston be re-emphasised to all pilots, and that the necessity for retaining the protective helmet till safely on the ground be stressed. In this same context, the advisability of removing the oxygen mask before striking the ground cannot be too strongly emphasized. A pilot rendered unconscious by ground impact can easily suffocate if the bail-out oxygen runs out before the pilot regains consciousness, since the A-13A oxygen mask with miniature regulator installed stops all flow of air unless a positive pressure is supplied to the regulator.

4. As an alternate method of allieviating the menace of the drogue gun piston swinging near the pilots head, many pilots have simply cut the weight off and disposed of it. This is what 1/LT (b) (6) finally did. All pilots in VF-124 are required to carry survival knives, however the position in which these knives are carried varies considerably. In many cases it would not be possible for a pilot in a parachute to reach a knife enclosed in a scabbard on the back of his leg. For this reason it is recommended that small pocket size survival knives, with a switch blade type shroud cutter blade be purchased for use by pilots. These knives are compact enough to be mounted on the torso harness in a position readily accessible to the pilot in any position. Samples of the shroud cutter have been tested by this squadron and have proved to be very effective in cutting shroud lines and webbing. Their use in a water survival situation would prove invaluable in getting free of shroud lines.

STATEMENT OF THE PILOT 1/LT [redacted], USMC, [redacted]/7398 CONCERNING
VF-124 AAR 2-62 F8U-1/F8U-2 BUNO 145396-146975 OCCURRING 27 FEBRUARY 1962

LT [redacted], 1/LT [redacted], LTJG [redacted], and myself launched a formation 2 flight at 1530. The briefing prior to the flight was normal for the hop and as outlined on the briefing card.

The aircraft assigned to me was NJ-433. I checked the yellow sheets of the previous flights noting the varied discrepancies. The two previous complaints I checked closely were the brakes and a high hydraulic pressure. Upon turn up and pre-flight, I noticed no discrepancies. Hydraulic pressure for both P.C. systems was slightly over 3400 pounds, which was noted on the previous hop. This is slightly higher than normal, but I have been told by maintenance, within limits.

The flight was normal and flown as outlined on the briefing card.

I flew #3 position until approximately ten minutes before we went to MCAAS Yuma at which time I moved to #4, 1/LT [redacted] taking #3 position.

The flight entered the traffic pattern at MCAAS Yuma and each of us made two touch and go landings.

We departed MCAAS Yuma and attempted to rendezvous at the 080° radial of El Centro TACAN as briefed. I did not have sight of any member of the flight during the time we left Yuma until 25 miles from El Centro. I saw 1/LT [redacted] directly ahead of me and retained sight of him until he turned into the sun over El Centro.

LT [redacted] then established a new rendezvous point on the 30 mile fix on the 290° radial of El Centro TACAN. I proceeded outbound on this radial attempting to regain visual contact with the other members of the flight. The rest of the flight at this time had joined and were flying a port orbit about the 40 mile fix of El Centro TACAN. LT [redacted] had earlier moved the rendezvous point from 30 to 40 miles.

Through radio conversations with LT [redacted] I fixed my position as below and at the flights 5 o'clock position. The flight saw me first. I located them high at my 3 o'clock. I asked LT [redacted] his air speed which he told me was 300 knots. My speed at this time was 260 knots. I accelerated to 300 knots as the flight passed above and ahead of me then continued to try to rendezvous from an astern position. The rate of closure seemed quite slow so I accelerated to 320 knots and continued to close on the flight. LT [redacted] then called that he was coming back to 75% of power and commencing a descent to return to Miramar. The flight at this time was in a slightly descending port turn. As they passed the sun I moved to the left side to improve my vision. As I continued to close I slowed to 310 knots. I passed to the right side again because of the sun and vision. I was at this time 500 to 600 feet behind and below. As the port turn continued I moved to the left side again for the same reason, to keep the sun out of my eyes. My visor was down the entire time. I was at this time slowly closing at 300 knots and slightly behind and below the flight which was in a V formation. I again passed to the right side because of vision, this time directly behind the flight.

Enclosure (2)

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH PARAGRAPH 70, OPNAV INST 3750.6D

My sideward movement was quite rapid as I moved approximately 200 feet to the right of the nearest aircraft. At this time I was 100 - 130 feet aft. I rolled approximately 60° bank to stop the sideward movement and to move back in position. I had all three aircraft in sight at this time. My speed was 300 knots. I felt the aircraft continue to roll past the angle of bank that I wanted and the next thing I realized I was inverted. I lost sight of all aircraft at this time. I tried to pull the throttle to idle, drop the speed brakes and pull nose down simultaneously, as I had lost sight of the flight.

I felt what appeared to be slip stream and the nose of my aircraft pitched violently down. I started spinning nearly straight down. I started spin recovery and then heard LT (b) (6) say "Get out of it." I reached for the face curtain and as I pulled it the canopy blew as the handle passed over my eyes. My arms were forced backward into the slip stream. I tried to pull the curtain further but could not. I locked my elbows together in front of my helmet and lunged forward with my head, arms and chest. The seat ejected.

The ejection was much smoother than I had expected. I felt the seat separate and I was tumbling through the air. I spread my arms and legs to stop this and waited for the chute to deploy. Its opening was quite abrupt.

After the chute deployed I saw another chute open to the West approximately a mile from me. I looked for the aircraft and saw both on the ground burning.

The drogue chute weight was tangled on one shroud line and passing to and fro near my head. It hit me several times so I finally cut it loose and dropped it. I had oxygen from the bailout bottle until I released my mask.

I dropped the survival pack 100 - 150 feet in the air. I noticed several cars and people gathering below me.

I landed quite smoothly, released from the chute and tried to signal LT (b) (6) who was circling overhead. Several civilians were at the wreckage of NJ-408. After being assured by a deputy sheriff that the other pilot was uninjured I remained near the wreckage of NJ-408 to await LTJG (b) (6)

We were there together until 1815 at which time we learned a SAR aircraft had landed at Borrego Springs County Airport. LTJG (b) (6) went to the airport to check with the pilots as to whether we should leave the scene. I was advised by a deputy sheriff that I was to go to the aircraft and return to Miramar.

I was driven to the airport and returned to Miramar.

I had no knowledge that I had collided with NJ-408 until I talked with LTJG (b) (6).

I feel this accident would not have happened if the flight had taken a path away from the sun. I cannot honestly say this was the primary cause of the collision. Vision was bad for me even with my visor down. This required me to change my flight path several times and delayed the rendesvous.

Before the collision, the sun was not in my eyes. I was concentrating solely on the other three aircraft to the point of a sensation similiar to target fixation. I am sure had I broken my scan once I was in close, the collision would not have occurred. I also feel this is the reason I did not notice my aircraft's altitude until it was inverted. I cannot honestly offer any other cause for this other than that I over controlled the aircraft as I banked to the left not realizing it because of the concentrated effort to maintain sight of the other aircraft. I am positive had I constantly shifted my gaze to other points, perhaps the ground, rather than staring at the other aircraft, I could have prevented this accident.

I was designated a Naval Aviator 4 October 1961. My total flight time is 400 hours; total F8U hours - 11.

(b) (6)

1/LT USMC

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STATEMENT OF THE PILOT LTJG [redacted] (b) (6), USNR, [redacted] (b) (6) /1315 CONCERNING VF-124 AAR 2-62 F8U-1/F8U-2 BUNO 145396-146975 OCCURRING 27 FEBRUARY 1962

This hop was a routine Form-1 and 2 syllabus flight, and each item was being covered on the brief card up to the time of the accident.

The 4 members of the flight were commencing a TACAN rendesvous 080 radial, 30MI El Centro TACAN. The flight leader and the #2 man (LTJG [redacted] (b) (6)) joined up without incident. #3 and #4 man were not joined, and the flight leader re-instructed #3 and #4 man to proceed to 290 radial, 40MI El Centro TACAN, and rendesvous there. Flight leader and #2 man established a port orbit at the designated fix, and shortly thereafter, #3 man joined the #1 and #2 men. #4 man was then sighted approximately 2000 feet below, proceeding West. The flight leader instructed him by radio to rendesvous. #4 man completed his rendesvous. The #4 man (1/LT [redacted] (b) (6)) switched sides, first from port to starboard to keep the sun out of his vision, and about this time, flight leader called for a 75% idle descent. We were in a port turn, when once again, #4 man crossed under from port to starboard. I was flying normal parade in the port turn on the leader, when I noticed #4 going through some unusual gyrations ahead and outside of the turn to port. He (#4) then disappeared from my field of vision, dropping aft and next recollection I have is that of being struck on my underside. I did not see the aircraft hit me.

The sensations I had immediately after impact was that of the aircraft going nose low, severly yawing and dropping with no apparent lift. I worked my stick around, and had no response at all. The aircraft never did go inverted while I was still in it.

Immediately after trying my controls, I set myself up in erect ejection posture, pulled the face curtain, and ejected. The ejection sequences performed normally, and as advertised. I dropped my seat pack approximately 100 feet from the deck, and I then landed without incident. I vaguely recollect seeing my aircraft shortly after ejection. It looked as if it may have had no wing.

Upon landing, I unstrapped, packed up my gear, and in about 15-20 minutes, local people picked me up and I requested to be taken to the scene of the wreckage. My aircraft apparently landed in a flat attitude, for the fuselage, including the tail section was all intact. The wing was reported to be about 3 miles Southeast of the fuselage wreckage. The accident occurred at approximately 1700, and at approximately 1830, we were flown back to NAS Miramar via Coast Guard UF.

I was designated a Naval Aviator 27 October 1961. I have 350 total flight hours and 310 total jet hours. I have 10 hours in the F8U, with no night time.

I see no possible prevention of this accident from my position (#2 man flying on leader in port turn).

[redacted] (b) (6)

LTJG USNR

Enclosure (3)

SPECIAL HANDLING REQUIRED IN ACCOORDANCE WITH PARA 7O, OPNAVINST 3750.6D

STATEMENT OF THE FLIGHT LEADER LT [redacted] USN, [redacted] 1310 CONCERNING VP-124 AAR 2-62 P8U-1/P8U-2 BUNO 145396-146975 OCCURRING 27 FEBRUARY 1962

The flight consisting of 1/LT [redacted], 1/LT [redacted] and LTJG [redacted] was briefed in the VP-124 Ready Room at 1410 on 27 February 1962. The flight was to be Formation 2 for [redacted] and [redacted] and Formation 1 for LTJG [redacted] The briefing card was followed and in addition some time was spent discussing the standard tacan rendezvous and the desirability during running rendezvous of maintaining lateral separation until reaching abeam so that the closure rate would be positively under control. The students asked a few questions and sounded eager and prepared for the flight. I altered the flight line-up as published on the schedule in order that [redacted] on his Form 1 would be #2 in the flight where I could keep him under close observation; [redacted] #3 and [redacted] #4. The flight call was "Black Flight". The briefing was completed at approximately 1440.

Aircraft were manned at approximately 1500 and we taxied for take off at 1515, Black 4 was delayed slightly while a low tire was inflated. Individual take offs were made commencing at 1523. The flight joined up promptly and as we departed the field and climbed out #3 and #4 were a bit rougher than average. I exercised the flight by signalling wingman and section cross unders all of which were executed satisfactorily. We practiced some "Finger Four" parade formation and some "Instrument parade formation and the flight performed satisfactorily. I had to prompt [redacted] on one occasion to step up slightly into the proper parade position and also asked the same of [redacted] during the instrument parade work. At 25,000 feet we practiced three break ups and rendezvous. The latter were fair with a few discrepancies; [redacted] was allowing his rendezvous to go to a very low angle off too early where as [redacted] and [redacted] were acute and had to go to the outside wing to the high closure rate. They did call "going to the outside", and kept each other informed as to their relative positions. With the flight joined again we practiced some tactical wing as briefed. [redacted] flew my wing and [redacted] flew [redacted] approximately a mile behind my section. After several turns during which time we headed generally toward Yuma I advised #3 and #4 to swap positions. I heard them change the lead and then made several more turns still going toward Yuma. I then requested the flight to join up in their present relative positions ie 1,2,4, and 3 and advised we would remain that way until joining up after the touch and go's at Yuma. I checked with Yuma tower for the Duty Runway and advised them we were coming. The flight joined and we descended to initial for Runway 3 at Yuma. As I levelled my wings inbound to initial I advised and signalled the flight to go to left echelon by crossing the section to the port side where Black 2 was already flying. I also advised the flight to change to "Button 3". We were cleared into the break (right hand break and traffic) and I noted that [redacted] (#2) was flying a poor wing but finally closed up prior to being cleared to break. We executed two touch and go landings each and departed to join up. I advised the flight to utilize the Yuma 280 radial recalling that El Centro tacan was reported inoperative. [redacted] (#2) joined promptly and I reported my distance from Yuma on the 280 radial to facilitate #4 and #3's rendezvous. Checking I found El Centro tacan operating and advised #4 and #3 to now utilize it. Upon reaching El Centro #4 and #3 had still not joined and I advised them I would

Enclosure (4)

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH PARAGRAPH 70, OPNAV INST 3750.6D

establish a port orbit. After approximately 180° of turn #3 reported having #4 in sight but shortly thereafter reported losing him in the sun. I briefly caught sight of an aircraft over El Centro as I was through 270° of turn but also lost him in the sun. I believed we would be more successful utilizing the standard tacan rendesvous as briefed so transmitted that the flight would now rendesvous on the El Centro 290° radial at 30 miles. This would be taking us in the general direction of Ramona, the Miramar initial. Black #2 (b) (6) flying a good tight wing, and I passed south of El Centro and then turned to intercept the 290 radial at 28,000'. My transfer fuel gauge showed below zero so I thought I would purge the wing and perhaps Black #4 and #3 would see what ever fuel dumped. Some fuel did dump and Black 4 reported, "have you in sight". Black 4 reported joining and also "Bingo", (1900#). Noting that we were in close proximity to restricted area R-2510 and almost at 30 miles, I advised Black 3 (b) (6) that we would continue to 40 miles. I called distance at approximately 36 miles and Black 3 replied he was at 12 miles. At 40 miles on the El Centro 290 radial I announced "point one" and commenced a 30° banked turn at 29,500' after approximately 80° of turn Black 4 (b) (6) joined in echelon on the starboard wing. I asked Black 3 his distance and he replied, twenty odd miles. As we passed point three I again asked distance and he replied 32 miles. We were also at 32 miles and (b) (6) announced "Tally Ho" at 9 O'clock down. I then saw (b) (6) about one mile distant, down approximately 1500 feet in my 1030-11 O'clock to 4 O'clock up and he replied "roger have you". I continued my turn to 290 and (b) (6) passed under my nose still down about 1500'. As I saw him go to my 1:30 to 2 O'clock posit I advised him to "come back port" so that he would not go too far behind. He acknowledged and I observed him start to close now at approximately my 4 O'clock low 1/2 to 3/4 of a mile. I then devoted my attention forward and asked Black 4 his fuel state, he replied 1500#. I asked, if anyone was lower, and Black 3 replied 1400#. I announced I was reducing power to 75%, starting a gentle descent and for the flight to loosen up until we approached initial and then to tighten it up. Black 3 (still joining) requested my airspeed, I replied 270 increasing to 300. The flight was now in a shallow port turn passing approximately 27,000 feet, Black 4 had crossed and was loose (15-20') on my port wing and Black 2 was at the same distance on my starboard wing. I looked out to starboard to see if Black 3 had joined. I saw an aircraft inverted, level with me and abeam, its fuselage no more than 20-30' away. The plane was slightly nose down and appeared to be rolling right and over taking as though just having completed 1/2 of a tight barrell roll. The front third was all I saw and at the time there appeared to be some vortices or vapor at the side of its fuselage. I assumed it was Black 3 because I could not imagine how my right wingman (Black 2) could have maneuvered to that position without hitting me. Fearing a collision I immediately increased my left bank and raised the nose hoping my left wingman could follow me safely as I did so.

After a couple of seconds I turned back starboard and saw an F8U descending and doing what looked like a lazy falling leaf. As the plane continued to fall I saw definitely that the wing was completely missing and fluid was streaming from the wing well. Suspecting how uncontrollable and rapidly the fuselage alone would likely descend I called "GET OUT OF IT!, "GET OUT OF IT NOW!". I wondered if his radio would still be operative and if he would hear me and

got what I thought was my answer as I observed the canopy leave followed by the seat. I saw the pilot drogue and main stabilizer drogue deploy and then realized that I would not see the main parachute until he was at 10,000'. I then looked around for other aircraft and seeing none, switched to Guard and transmitted a MAYDAY call. "Politician" and "El Centro" answered, plus others. I then called El Centro by name and transmitted my approximate position from El Centro (my tacan had unlocked). Politician requested my bearing and distance from Yuma and I told them to standby. I returned to our tactical frequency and asked for any Black flight to check in - Black 4 answered. I asked what he had seen and he reported only that which I too had seen. I asked his state which was 1400# and told him to return to Miramar call the squadron base radio and tell them what had happened. Shrotly thereafter we both observed the smoke and flame of a crash NNE of Borrego. I switched back to Guard again called Politician and reported my position from Yuma as 282° radial 95 miles, my tacan was then locked on Yuma. A moment later I selected Emergency IFF and was advised by Politician and San Diego Approach to squawk 3-77 and 1-00 which I did. San Diego also requested that I call them. I did not recognize the small town and airport below but know that having a positive tacan position would afford search and rescue an accurate location. Soon two chutes became visible and the noise of the PRT-3 beacons became extremely evident to the extent that further transmissions on Guard channel were rendered inaudible. The chutes were approximately 1 mile apart and as they descended into the shadow of the nearby mountain I switched to the ADF position of the ARA-25. The #1 needle only searched back and forth as I suspected Politician and El Centro were still calling and the combination of signals could not be resolved.

I tried calling Politician on Stargazer frequency but got no reply. I then called San Diego Approach Control who advised they also had my position fixed. I then descended and attempted to observe the parachute landings. The PRT-3 beacons stopped as the chutes landed and I descended to determine the pilots' location and condition. I initially saw one chute adjacent a sizable road and observed cars stopping and turning around. As I got closer, the pilot had apparently gathered up the chute for it disappeared. I circled again and saw a pilot in the center of a rather open desert area, there were two station wagon vehicles approaching him and he waved his arms as I passed. Still not certain that I had seen both pilots I orbited until I saw a group of cars at the road side and the other pilot waving also.

During these latter moments I observed an additional plume of smoke marking the second crash. I climbed and orbited the area sketching the location of the aircraft parts on my knee board and noted that none had apparently struck any buildings or property of consequence. There were groups of people around the burning portions of the aircraft, one with a wing and one without. No one was in vicinity of the severed wing which did not catch fire. I heard and aircraft talking to El Centro, his call was Overpass 777. He relayed to El Centro that the pilots were OK and being picked up by civilians. I advised Politician that the pilots were being picked up and after one last orbit observed both pilots on the ground with civilians and acknowledged their waves by jassing the engine. I departed for Miramar calling San Diego Approach and advised them of the rescue progress. They reported a

Coast Guard UF was enroute and I talked briefly to him on the same frequency. I observed the UF and assured myself he was headed for Borrego. I looked up Borrego in the enroute supplement and saw that it had 5200' of asphalt runway. The UF indicated he would land there and Approach Control reported the Borrego Sheriff was taking the pilots to the airport. I switched to Miramar tower, returned and landed.

(b) (6)

LT USN

STATEMENT OF 1/LT [redacted], USMCR, [redacted]/7398 CONCERNING VF-124
AAR 2-62 F8U-1/F8U-2 BUNO 145396-146975 OCCURRING 27 FEBRUARY 1962

The flight started in a very normal fashion with a brief by LT [redacted]. The other pilots in the flight were 1/LT [redacted] and LTJG [redacted]. [redacted] and myself were on a formation two (2) hop and [redacted] was on a formation one (1) hop. LT [redacted] gave us a complete briefing including all the emergency, lost communication, and Yuma airport procedures.

From take-off until the time of the accident the hop proceeded exactly as briefed. This included parade, instrument parade and finger four formations. We practiced single and section cross-unders, tactical wing position, and break-ups and rendesvous. We then proceeded to Yuma for two touch and go landings.

After two landings each we departed the pattern at Yuma climbing out to flight level 300 on the 088°R of Yuma TACAN. When I was at about 1PM LT [redacted] called for us to switch to the El Centro TACAN and climb out on the 290° radial for a rendezvous at 30 miles. I tuned in El Centro and continued so as to intercept the 290° radial out of El Centro. By this time [redacted], the number two man, had already joined on number one. When I reported to the leader that I was 10 miles behind him he dumped his wing tanks in an effort to make himself visible to me. At this time I sighted the leader and his wingman directly in front of, and level with, me at a distance of about 9 or 10 miles. I informed the leader (LT [redacted] of this and he "rogered". Shortly after this he called and told us to rendesvous at 40 nautical miles instead of 30 nautical miles on the 290° radial. At 40 nautical miles the leader started a port turn for a tacan rendesvous (we had been briefed for this type of rendesvous prior to the hop). By the time the leader and number two man were at the number two position, I was joined on the number two man's wing. [redacted], by this time, had called and said he was about 20 miles out on the 290° radial. We continued in a port orbit until [redacted] called and said he was 32 miles out on the 290° radial. At this time we were also 32 miles out having just passed the number 4 position of the tacan rendesvous. Shortly after this I called a "tally ho" on [redacted] who was crossing from our 5 O'clock position to our 11 O'clock at an altitude about 1000' below us. LT [redacted] then picked up [redacted] and gave him our bearing on his aircraft. [redacted] called "tally ho" and asked what our airspeed was at that time. LT [redacted] told him it was 270 knots. [redacted] then started a turn to the right, still below us. I then lost sight of him passing beheath the flight, from left to right.

At this point LT [redacted] called the flight for a power reduction to 75% and let down to the field. This was to reduce our fuel consumption to a minimum since I had shortly before called a fuel state of 1500#. LT [redacted] then called and told us to maintain loose positions until just prior to entry to the field.

The sun at this time was almost in a direct line between the leader's aircraft and mine so I elected to cross under to the port side of his aircraft. I did not have visual contact with [redacted] at this time, nor had I seen him since he crossed under us some time before.

Enclosure (5)

I initiated a section cross under with my right arm thinking that he might be further aft than I had looked. At this point I eased the power back making a normal cross under, at a normal rate of speed. I had just established myself on the left wing of the lead aircraft when I observed what appeared to be the number four aircraft ([redacted]) rolling into an inverted position under the number two man ([redacted]).

I think LT [redacted] observed this at the same time I did, as he rolled to the left and pulled away from the number two and four aircraft. When I saw his wing drop I rolled about 70° or 80° and pulled out to the left and up pretty hard. I rolled over on top so I could locate the other aircraft in the flight. LT [redacted] was at about my 2 O'clock and another aircraft was at about my 4 O'clock pointed about 70° nose down with no wing. LT [redacted] called "get out", "get out now". Almost immediately the pilot of that aircraft ejected. The canopy left the aircraft, the seat fired, and immediately the drogue chute deployed. The seat and drogue chute rapidly went out of sight.

During this time I was following LT [redacted] in a tail chase. I still had not fully realized what had happened. I never did see the third aircraft which worried me because I was sure he was in the same general airspace we were in, yet was unable to locate him.

LT [redacted] then called and asked if anyone in the flight could read him. I answered up and told him I was following him (on his tail). No one else answered so I could only assume the worst.

LT [redacted] then asked what my fuel state was. I told him 1400#. He then directed me to proceed home and land, and to give base radio a call and tell them what had happened. He was talking to G.C.I. getting a fix on our location prior to this and I assume wanted to return immediately (to guard channel).

I then left the scene and began a track to put me at Ramona for a normal field entry, trying to contact base radio. I finally made contact with base and informed them what had happened and that LT [redacted] was still orbiting the scene.

Shortly after this I made a normal field entry and landing.

[redacted]

1/LT USMCR

STATEMENT OF MAINTENANCE OFFICER REGARDING ACCIDENT OCCURRING 27 FEBRUARY 1962 INVOLVING F8U-1 BUNO 145396

1. F8U-1 BUNO 145396 was accepted from Fighter Squadron ONE FOUR TWO on 27 November 1961. It received a calendar intermediate inspection on 5 January 1962. Subsequent to this inspection it had flown 73.8 hours and a total of 943.3 hours since acceptance by the Navy.

2. All pertinent instructions and directives had been complied with as indicated by maintenance records and aircraft logs.

3. The engine, a J-57-P4A, serial number P608170 had 204.3 hours since overhaul and a total of 650.8 hours since new. There were no pertinent uninstalled bulletins.

4. Maintenance records indicate this aircraft was properly serviced and pre-flighted.

5. A review of the past ten OPNAV forms 3760 (Rev 5-61) revealed no outstanding discrepancies, nor any which could have contributed materially to this accident.

[redacted] (b) (6)

LCDR USN

Enclosure (21)

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH PARA 70, OPNAVINST 3750.6D

RESUME OF PILOT'S FLIGHT EXPERIENCE

[redacted] 1/LT, [redacted] /7398, USMC

Training Command	A/C Type	Hours	Carrier Landings
Basic and Advanced	T-34	46.2	0
	T-28	136.6	8
	F9F-8T	85.1	0
	F9F-8B	52.3	4
	F11F-1	25.8	0
TOTAL		346.0	12
Operational			
HMS-33	F9F-8B	9.5	
MCAS El Toro	F9F-8T	24.7	
	TV-2	6.4	
VF-124 (RAG)	F8U-1, -2	8.5	
Total Operational		49.1	
Total All Types		395.1	
Total Jet Time		225.0	

Designated Naval Aviator 4 October 1961

RESUME OF PILOT'S FLIGHT EXPERIENCE

[redacted], LTJG, [redacted]/1315, USN

	A/C Type	Hours	Carrier Landings
Training Command			
Basic and Advanced	T-34	37.8	0
	T2J1	120.8	6
	F9F-8T	84.2	0
	F9F-8B	49.0	6
	F11F-1	24.9	0
TOTAL		316.7	12
Operational			
VA-126 IFTD	F9F-8T	27.1	0
VF-124 (RAG)	F8U-1, -2	9.5	0
Total Operational		36.6	
Total All Types		353.3	
Total Jet Time		315.0	

Designated Naval Aviator October, 1961

ORIGINAL

ADDENDUM TO PAGE 1, ITEM 30 OF VF-124 MOR 3-62

On February 27, 1962 at approximately 1525 uniform time LTJG (b) (6) and 1/LT (b) (6) took off from NAS Miramar as number 2 and 3 men of a scheduled four plane formation training flight. It was the first formation hop for LTJG (b) (6) and the second formation hop for 1/LT (b) (6). Both men had sufficient nutrition and adequate rest in the 24 hours preceeding the accident. The flight was thoroughly briefed.

The flight progressed in a normal manner through "finger four", instrument parade, break up and rendesvous, and tactical wing maneuvers. At this point each pilot shot two touch and go landings at MCAAS Yuma, Arizona. LT (b) (6) the flight leader then directed the flight to make a running rendesvous enroute to Miramar via El Centro and LTJG (b) (6) joined on the starboard wing in parade. LT (b) (6) advised 1/LT (b) (6) that the rendesvous point would be on the 290° radial of El Centro at 30 miles. Due to the proximity of a restricted area the rendesvous point was changed to 40 miles and at that point a standard port orbit was set up and after 90° of turn the #4 man, 1/LT (b) (6) joined the flight. After approximately 180° of turn the #4 man sighted 1/LT (b) (6) and he responded with "Roger, have you". 1/LT (b) (6) passed under the formation to the inside of the turn and noted immediate difficulty with keeping the flight in sight due to the setting sun. He, therefore, began maneuvering back and forth from port to starboard behind the formation to avoid the sun's glare and close the formation from astern. The last time he moved across from port to starboard he began to slide out and behind the formation. In an attempt to recover he went into a 60° bank to port, but inadvertently continued the roll to an inverted position at 300 knots. 1/LT (b) (6) lost sight of all three aircraft at this time. He attempted recovery by pulling the throttle to idle, dropping the speed brakes and pulling the nose down. During this inverted maneuver 1/LT (b) (6) airplane collided with LTJG (b) (6) s airplane. The forward portion of (b) (6) fuselage struck the starboard tip of (b) (6) wing (Photo #1) then (b) (6) starboard wing tip dug into the vertical fin of (b) (6) aircraft and scraped along the vertical fin (Photo #2) before striking the starboard wing of (b) (6) airplane. During this sequence of events, the entire wing of (b) (6) aircraft was separated from the fuselage and the starboard wing of (b) (6) aircraft was torn off. (The concentration of damage on the starboard side of both aircraft establishes the fact that 1/LT (b) (6) was inverted at the moment of collision)

After the collision LTJG (b) (6) felt his aircraft pitch nose down and noting no response from the controls he elected to eject. At the same time 1/LT (b) (6) felt his aircraft begin a spinning motion and he attempted anti-spin control procedures when he heard the flight leader transmit "Get out of it! Get out of it now!" 1/LT (b) (6) experienced some difficulty in pulling the face curtain all the way and finally lunged forward in the seat with the total force of the upper half of his body.

The ejections and descents proceeded normally and both pilots landed in the desert on the outskirts of Borrego Springs, California. They were picked up by civilians and taken to Borrego Springs County Airport and then flown to NAS Miramar by Coast Guard UP. Immediate examinations at the NAS Dispensary Miramar were negative.

MEDICAL OFFICER'S REPORT OF A/C ACCIDENT, INCIDENT, OR GROUND ACCIDENT — PAGE 1

OPNAV FORM 3750-8 (Rev. 5-58) See OPNAVINST. 3750.6C for instructions - SPECIAL HANDLING REQUIRED

OPNAV REPORT 3750-1

SECTION A - IDENTIFICATION

1. FROM (Name and mailing address of activity)			2. BOB NUMBER
VF-124, U.S.N.A.S. MIRAMAR 45, CALIFORNIA			3-62
(b) (6) (Signature of Medical Officer)	DATE	(b) (6) (Signature of Appointing Authority)	DATE
LT. MC USNR	14 Mar 62	CDR USN	14 MAR 62

5. TYPE OF MISHAP	6. TIME AND ZONE	7. DATE	8. PLACE
[X] ACCIDENT [ ] GROUND ACCIDENT [ ] INCIDENT	1704 U	27 Feb 62	Lat. 33 deg. 16 min. N. Long. 116d. 22 min W, Borrego Springs, Calif.

9. MODEL A/C	10. BUNO	11. NO. OF OCCUPANTS	12. TYPE ACCDT.	13. DAMAGE CODE	14. UNIT OPERATING A/C
F8U-1	145396	1	A1/G8	A	VF-124

15. INDIVIDUALS INVOLVED - USE ADDITIONAL SHEETS IF REQUIRED. NAME (Last, first and middle initials)	16. UNIT TO WHICH ATTACHED	17. RANK, RATE	18. FILE/SERV. NO. DESIGNATOR	19. BILLET	20. BRANCH OF SERVICE	21. INJURY CODE	22. DISPO SITION
a. IN CONTROL OF A/C (b) (6)	VF-124	1stLT	(b) (6) 7398	Pilot	USMC	E	E
b.	VF-124	LT	1716	Pilot	USN	E	E
c.							
d.							

23. CLARIFICATION OF ITEMS 15 AS WHEN NECESSARY

24. MODEL - OTHER A/C IF INVOLVED	25. BUNO	26. NO. OF OCCUPANTS	27. UNIT OPERATING A/C	28. DAMAGE CODE	29. REPORT NO.
F8U-2	146975	1	VF-124	A	2-62

30. DETAILED NARRATIVE ACCOUNT OF ACCIDENT (Use additional 8 X 10½ plain sheets if required)

See Attached Addendum

200195

SECTION B - MEDICAL OFFICER'S QUESTIONNAIRE

YES	NO	DID THE FLIGHT SURGEON: (If "NO" state reason in space below.)	
X		1. VISIT THE SCENE OF THE MISHAP?	
X		2. PARTICIPATE FULLY IN THE FIELD INVESTIGATION?	
X		3. PARTICIPATE FULLY IN THE DELIBERATIONS OF THE A/C ACCIDENT BOARD?	

GIVE APPROXIMATE NUMBER OF HOURS SPENT BY THE FLIGHT SURGEON:	4. IN FIELD INVESTIGATION	5. IN BOARD DELIBERATIONS	6. IN PREPARATION OF THIS REPORT
	7	6	8

7. REPORT PREPARATION CHECK LIST

[X] ALL PARTS OF FORM COMPLETED [X] SURVIVORS' NARRATIVES [X] PHOTOS [X] CONCLUSIONS AND RECOMMENDATIONS [X] REQUIRED COPIES FURNISHED

U. S. GOVERNMENT PRINTING OFFICE : 1960-582044

MEDICAL OFFICER'S REPORT OF A/C ACCIDENT, INCIDENT, OR GROUND ACCIDENT—Page 2

OPNAV FORM 3750-8A (REV. 8-58) — OPNAV REPORT 3750-7

SECTION C—PHYSIOLOGICAL, HUMAN ENGINEERING, DESIGN, SOCIO-PSYCHOLOGICAL, AND TRAINING FACTORS WHICH CONTRIBUTED IN SOME DEGREE TO THIS A/C ACCIDENT, INCIDENT, OR GROUND ACCIDENT

NAME OF INDIVIDUAL (Last, first, middle) [redacted] (b) (6)

MODEL A/C: F8U-1

Check E-Established, S-Suspected, or P-Present for each factor selected. Additional 8X10½ plain sheets will be used for the supporting account of items checked below. Identify each statement with the factor and section identification (e.g., C1, C2, etc.). Attach all sheets pertaining to these factors to this form upon completion.

E	S	P	✓ FACTORS
			PHYSIOLOGICAL:
			1. Physically incapacitated in flight
			2. "G" forces
			3. Environmental stress - External
			4. - Internal
			5. Dysbarism/explosive decompression
			6. Diet
			7. Fatigue
			8. Hypoxia
			9. Related illness
			10. Vertigo/Disorientation/Illusions
			11. Hyperventilation
			12. Drugs
			13. Physical state
			14. OTHER:
			HUMAN ENGINEERING AND DESIGN:
			15. Personal equipment
			16. Displays and/or controls
			17. Work arrangement
X			18. Working environment Sun glare
			19. Habit interference
			20. OTHER:
			SOCIO-PSYCHOLOGICAL: *(Emotional stress from non-duty sources)*
			21. Pregnancy
			22. Illness or death
			23. Arguments
			24. Elated/Depressed state
			25. Personal habits - Drinking
			26. - Sex
			27. - Gambling
			28. - Debts

E	S	P	✓ FACTORS
			SOCIO-PSYCHOLOGICAL: *(Emotional stress from duty sources)*
			29. Expeditings/Delays
			30. Weather
			31. Mechanical Problems
			32. Social and working relationships
			33. Personal comfort
			34. Regulations
			35. Facilities
			36. Navigation
			37. Duty assignment
			38. Personality traits
			NON-STRESS FACTORS:
	X		39. Faulty attention
X			40. Poor judgement
			41. Forgetfulness
			42. OTHER SOCIO-PSYCHOLOGICAL FACTORS
			TRAINING FACTORS:
			43. Physiological training
			44. Emergency Procedures training
			45. Survival and rescue training
			46. Refresher training
			47. Transition training
		X	48. OTHER: Low Arc in Type

SECTION D — AIR CREW DATA *(fill in where applicable)*

1. Flight time past 30 days	10	7. Total time in model	8.5
2. Flight time last 24 hours	3.0	8. Number of days grounded last month, give reason	None
3. Number of flights in last 24 hours	2		
4. Time at controls this flight	1.5	9. Number of and dates of previous accidents	None
5. Number of hours duty last 24 hours	None		
6. Total flight time	395.1		

SECTION E — CONTRIBUTING FACTORS AND THEIR ANALYSIS *(As condensed from Part I, Sec. D and Part VIII of the ARR)*

NOTE: Fill in this section only on that set of forms prepared for FIRST individual listed in Section A, i.e. 15(a). Attach additional sheets as necessary.

See Addendum

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ADDENDUM to Page 2, Section C of VF-124 MDR 3-62

Item C-18, C-39 and C-40:

Sun glare was a contributing factor to this accident since because of it 1st.Lt. (b) (6) began moving laterally back and forth behind the formation from port to starboard to minimize the glare. During the final transition from port to starboard he noted he was slipping outside and behind the formation. At this point faulty attention and poor judgement entered the picture. He was concentrating on the formation's position and closing on them to obtain the proper formation position. To do this he rolled into 60° of left bank and as a result of this overcontrolling he inverted while setting up an excessively fast closure rate. He lost sight of the formation because of the inverted attitude and with the excessive closure rate and overcontrolling collided with LTJG (b) (6) aircraft.

MEDICAL OFFICER'S REPORT OF A/C ACCIDENT, INCIDENT, OR GROUND ACCIDENT – PAGE 3 OPNAV REPORT 3750-7
OPNAV FORM 3750-88 (5-88)

SECTION F - SAFETY, PERSONAL, AND SURVIVAL EQUIPMENT
Prepare a narrative account of damaged or failed items. Identify each item discussed (e.g., F1, F2, etc.)

NAME OF INDIVIDUAL (Last, First, Middle): (b) (6) | MODEL A/C: F8U-1

GENERAL DESCRIPTION OF EQUIPMENT	AVAILABLE YES	AVAILABLE NO	SPECIFIC MODEL OR TYPE	UTILIZED YES	UTILIZED NO	FAILED YES	FAILED NO	DESCRIPTION OF DAMAGE TO EQUIPMENT
1. Shoulder harness	X		Martin Baker F-5	X			X	
2. Lap belt	X		Martin Baker F-5	X			X	
3. Inertia reel	X		Inertia Reel Assembly (harness)	X			X	
4. G-Suit	X		Z-3 Cutaway	X			X	
5. Pressure suit-full or partial								
6. Exposure suit								
7. Flight suit (Other than above)	X		Summer Orange	X			X	
8. Helmet	X		APH-5	X			X	
9. Goggles/Eyeshield	(1)			(1)			(3)	Paint chips from drogue piston cracked visor shield and shattered visor.
10. Shoes	X		Flight(Field)	X			X	
11. Gloves	X		Leather, light	X			X	
12. Life vest	X		Mark 111 6		X			
13. Life raft	X		PK-2, Hi Speed Container		X			
14. OTHER:								
15. SIGNAL DEVICE - Flare (Night)	X		Day and Night		X			
16. - Flare (Day)	X		Signal Mod 0		X			
17. - Dye marker	X		Dye Marker		X			
18. - Radio	X	(A)	ANPRT 3 Beacon	X			(2)	
19. - Flashlight								
20. - Mirror	X		Survival Signal		X			
21. OTHER:								
22. SURVIVAL GEAR - Knife	X		Survival	X			X	
23. - First aid kit	X		PSK-2		X			
24. - Shelter								
25. - Food								
26. OTHER:								
27. RESCUE - Vehicle	X		Civilian Vechicle	X			(2)	
28. - Sling, Net, Stretcher								
29. OTHER:								

SECTION G - DETAILED EQUIPMENT QUESTIONNAIRE

OXYGEN EQUIPMENT

1. MASK - MODEL OR TYPE: A-13-A
2. MODIFICATIONS, IF ANY: None (1)
3. REGULATOR - MODEL OR TYPE: Robert SHAW 1861 (6)
4. MODIFICATIONS, IF ANY: None
5. PREFLIGHTED BY USER? [X] YES [ ] NO
6. IF NO, WHY NOT:
7. LIST DISCREPANCIES NOTED BY PREFLIGHT CHECK:
8. OXYGEN SUPPLY: PRIOR TO FLIGHT 320 LITERS (Liquid) _____ P.S.I. (Gas); TIME OF ACCIDENT 325 LITERS (Liquid) _____ P.S.I. (Gas)
9. WAS OXYGEN IN USE AT TIME OF ACCDT. [X] YES [ ] NO
10. IF YES, WAS SELECTOR SETTING [X] 100% [ ] NORMAL
11. WAS ALL OXYGEN EQUIPMENT NECESSARY FOR THIS FLIGHT AVAILABLE? IF NO, LIST ITEMS AND REASON WHY. [X] YES [ ] NO
12. WAS OXYGEN HOSE REMOVED AT ANY TIME IN FLIGHT? IF YES, GIVE DURATION AND REASON. [X] NO [ ] YES

RELEASE DEVICES

13. TYPE CHUTE RELEASE DEVICE: Martin Baker F-5 (1)
14. TYPE HARNESS RELEASE DEVICE: Martin Baker F-5 ( )
15. WHEN WERE RELEASE DEVICES ACTIVATED? during ejection sequence (2)
16. WERE DIFFICULTIES ENCOUNTERED WITH RELEASE DEVICES? IF YES, STATE DIFFICULTIES, WHEN ENCOUNTERED AND CAUSE. [ ] YES [X] NO
17. WERE DIFFICULTIES ENCOUNTERED AFTER ACTIVATING RELEASE DEVICES? IF YES, STATE DIFFICULTIES, WHEN ENCOUNTERED AND CAUSE. [ ] YES [X] NO
18. DID LIFE VEST INFLATE PRIOR TO ACTIVATING RELEASE DEVICES? IF YES, WHAT DIFFICULTIES DID THIS PRODUCE? [ ] YES [X] NO

(Continued on OPNAV FORM 3750-8C)

U. S. GOVERNMENT PRINTING OFFICE : 1991-000000

MEDICAL OFFICER'S REPORT OF A/C ACCIDENT, INCIDENT, GROUND ACCIDENT — PAGE 4
OPNAV FORM 3750-8C (5-58) — OPNAV REPORT 3750-7

SECTION G - DETAILED EQUIPMENT QUESTIONNAIRE (Continued)

NAME OF INDIVIDUAL (Last, first, middle): [redacted] (b) (6)
MODEL A/C: F8U-1

RESTRAINT HARNESS

19. INTEGRATED HARNESS SYSTEM, MODEL/TYPE: Martin Baker F-5 (1)
20. INTEGRATED? [X] FULL [ ] PARTIAL
21. MODIFICATIONS, IF ANY STATE REASON:
22. DID INTEGRATED HARNESS FIT PROPERLY? IF NO, LIST DISCREPANCIES IN FIT AND GIVE REASONS THEREFOR: [ ] NO [X] YES
23. INTEGRATED HARNESS FITTING WAS CONDUCTED BY: [ ] WEARER [ ] FLIGHT SURGEON [X] PARACHUTE RIGGER [ ] AVIATION EQUIPMENT OFFICER [ ] OTHER
24. IF SHOULDER HARNESS WAS USED, WAS IT: [ ] LOCKED [X] UNLOCKED [ ] TIGHT [ ] SLACK [ ] OTHER CONDITION

HELMET

25. TYPE HELMET: APH-5
26. LIST PRESCRIBED MODIFICATIONS: Chin Strap, Nape Strap and Hardman Fittings (4)
27. OTHER MODIFICATIONS AND REASON FOR THEM:
28. DID HELMET FIT PROPERLY? IF NO, GIVE REASON: [X] YES [ ] NO
29. HELMET FITTING WAS CONDUCTED BY: [ ] WEARER [ ] FLIGHT SURGEON [X] PARACHUTE RIGGER [ ] AVIATION EQUIPMENT OFFICER [ ] OTHER

PARACHUTE

30. TYPE CHUTE: Martin Baker F-5
31. LAST PACKING DATE: 2-2-62
32. MODEL/TYPE BAILOUT OXYGEN: Martin Baker F-5 (2)
33. AUTOMATIC RIPCORD, IF INSTALLED (Model and type): [ ] NONE Martin Baker F-5
34. DID AUTOMATIC RIPCORD FAIL? IF YES, WHY? [X] NO
35. WAS RIPCORD ACTIVATION: [ ] MANUAL [X] AUTOMATIC?
36. IF MANUALLY ACTIVATED STATE REASON AND ANY DIFFICULTIES ENCOUNTERED:
37. DID CHUTE OPEN IMMEDIATELY? IF NO, GIVE REASON: [ ] YES [X] NO Barostat set for 10,000 to 13,000 feet (1)
38. ALTITUDE THAT CHUTE OPENED: Between 10 and 13000
39. OPENING SHOCK WAS: [ ] SLIGHT [ ] MODERATE [X] SEVERE
40. BODY POSITION AT OPENING: upside down with arms and legs extended
41. CONDITION OF CHUTE AFTER OPENING: Excellent
42. CHUTE OSCILLATION PRESENT: [ ] NONE [X] SLIGHT [ ] MODERATE [ ] SEVERE
43. IF OSCILLATION WAS PRESENT, HOW WAS IT STOPPED? Not stopped
44. WEATHER CONDITIONS DURING DESCENT (List in sequence): Clear with unlimited visibility
45. TOPOGRAPHY OF LANDING SITE: desert (2)
46. WAS BAILOUT OXYGEN CONNECTED? [X] BEFORE EXIT [ ] AFTER EXIT [ ] NO [ ] N.A.
47. WAS BAILOUT OXYGEN USED? IF NOT, WHY? [X] YES [ ] NO
48. WHEN WAS IT ACTIVATED? [ ] BEFORE EXIT [X] AFTER EXIT (3)
49. GIVE DIFFICULTIES ENCOUNTERED WITH BAILOUT OXYGEN AND THEIR CAUSE, IF ANY:
50. WAS CHUTE HARNESS: [ ] TIGHT [X] SNUG [ ] LOOSE
51. WAS A SITTING POSITION IN SLING OBTAINED DURING DESCENT? IF NOT, WHY? [ ] NO [X] YES [ ] NOT ATTEMPTED ( )
52. SEAT CUSHION IF PROVIDED (Model/Type): [ ] NONE MB-F5 (5)
53. WAS PARARAFT LANYARD CONNECTED TO LIFE VEST D RING? IF NOT, WHY? [X] NO [ ] YES
54. LIST TYPE OF PARACHUTE TRAINING COMPLETED BY THIS INDIVIDUAL: [ ] NONE Preflight and ejection seat checkout with sling drill in squadron 1959, Ejection Seat checkout, Feb 1962
55. IF ATTEMPT WAS MADE TO RELEASE PARARAFT DURING DESCENT, WAS RELEASE ACTIVATED SUCCESSFULLY? [ ] YES [ ] NO
56. IF NO, GIVE REASON:

OTHER

57. IF G-SUIT, EXPOSURE SUIT, FULL OR PARTIAL PRESSURE SUIT WAS WORN, DID IT FIT PROPERLY? IF NOT, LIST DISCREPANCIES IN FIT AND GIVE REASONS THEREFOR: [X] YES [ ] NO
58. WAS G-SUIT EQUIPPED WITH A SPRING-LOADED DISCONNECT ADAPTER? IF NO, GIVE REASON: [X] YES [ ] NO
59. LIST ALL ITEMS OF NON-STANDARD CLOTHING OR SURVIVAL EQUIPMENT UTILIZED:
60. WAS ANY ITEM OF EQUIPMENT LOST? IF YES STATE ITEM, WHEN LOST, AND REASON FOR LOSS: [X] NO [ ] YES
61. WAS ANY ITEM OF EQUIPMENT DISCARDED? IF YES, STATE ITEM, WHEN DISCARDED, AND REASON FOR DISCARD: [X] NO [ ] YES

SECTION H - EMERGENCY EXIT FROM A/C AND SURVIVAL FACTORS

NAME OF INDIVIDUAL (Last, first, middle): [redacted] (b) (6)

MODEL A/C: F8U-1

S	E	S-SUSPECTED, E-ESTABLISHED	REMARKS
	X	1. EJECTION - Attempted	
(5)	X	2. - Accomplished	
	X	3. - Through canopy	See Addendum
YES	NO	EJECTION DIFFICULTIES ENCOUNTERED	IF YES, EXPLAIN DIFFICULTIES
X		4. - Prior to	
X	(2)	5. - During	See Addendum
	X	6. - Subsequent to	
		7. Give type and model of seat used	Martin Baker F-5
		8. BAILOUT - Attempted	
		- Accomplished	

9. ALTITUDE AT TIME OF EXIT (feet): ABOVE SEA LEVEL 27 M ABOVE TOPOGRAPHY 26.5 M

10. ATTITUDE OR MANEUVER OF A/C AT EXIT OR IMPACT: Rapid right hand roll, nose down (B)-(1)-(5)

11. AIRSPEED: 300 kts

12. COLLISION OF A/C WITH: [X] GROUND [ ] WATER

13. CONTROLLED? [ ] YES [X] NO [ ] UNKNOWN

14. POWER: [X] ON [ ] OFF

15. WHEELS: [X] UP [ ] DOWN

16. FLAPS: [ ] FULL [X] UP [ ] PARTIAL

17. CANOPY POSITION AT EXIT OR IMPACT: [ ] OPEN [ ] CLOSED [X] JETTISONED

18. SEA STATE:

19. AIR TEMP.: 52 °F

20. WATER TEMP.: °F

21. A/C FLOATED: SEC.

22. TIME IN WATER:

23. TIME IN RAFT:

BAIL OUT OR COLLISION WITH WATER OR GROUND

24. EXIT USED:

25. IS THIS THE RECOMMENDED EXIT? IF NO STATE REASON FOR CHOICE. [ ] YES [ ] NO

26. DIFFICULTIES WITH THIS EXIT WERE: [ ] IN REACHING [ ] IN OPENING [ ] IN EXITING

27. STATE NATURE OF DIFFICULTY:

28. BODY POSITION DURING EXIT:

29. LIST OTHER FACTORS NOT INDICATED ABOVE WHICH AFFECTED EXIT FROM A/C:

SURVIVAL FACTORS: Check factors below which are appropriate for this accident. Prepare a detailed narrative account of the factors checked below and attach to this form. Identify each item discussed by item number (e.g., H30, H31, etc.)

	COMMUNICATIONS:		MAINTAINING BODY TEMPERATURE:
	30. Communicated position prior to mishap		50. Items used as shelter
X	31. Witnesses at scene		51. Items used as clothing
X	32. Electronic signal devices		52. Fire
	33. Visual signal devices		53. OTHER:
	34. Auditory signal devices		ENVIRONMENTAL HAZARDS:
	35. OTHER:		54. Exposure to natural forces
	TRAVEL:		55. Exposure to dangerous animals and plants
X	36. LAND		56. Unfriendly native population
	37. WATER		57. OTHER:
	SHELTER:		MORALE:
	38. Life raft		58. Isolation
	39. Parachute		59. Psychological shock
	40. A/C structure		60. Lack of motivation to survive
	41. Natural shelter		61. Boredom
	42. Man-made shelter		62. Rationing, activities, and group coordination
	43. OTHER:		63. OTHER:
	WATER SOURCE:		FOOD SOURCE:
	44. Desalter kit, seawater or solar still		64. Prepared survival rations
	45. Rain, dew, snow, ice, etc.		65. Animals/plants
	46. Processed beverages		66. OTHER:
	47. Canteen, thermos, water breaker, etc.		SURVIVAL TRAINING RECEIVED PRIOR TO MISHAP:
	48. Streams, ponds, wells, etc.		67.
	49. OTHER:		

ADDENDUM to Page 5, Section H of VF-124 MCR 3-62

Item H-3, H-4:

1st.Lt. (b) (6) reported that upon pulling the face curtain, as he reached the level of his forehead, he felt a violent force which he interpreted as wind blast pulling his arms and the face curtain back over his head. He said he thought the canopy had jettisoned early. He did not release the face curtain since he felt he would not be able to reach the auxillary handle if he did. Therefore, he locked both elbows in front of his face and lunged forward with his entire torso pulling the curtain home. The ejection sequence proceeded normally. Later detailed checks with aviation equipment and survival gear personnel failed to reveal any evidence of premature canopy jettison. The canopy interruptor mechanism was clean. Apparently the canopy did not jettison early, but the force (b) (6) experienced was due to extreme transverse G caused by his airplane minus the starboard wing being in a violent rolling maneuver. This investigator is baffled how the pilot escaped a vertebral injury ejecting in this unorthodox position and maneuver. However, A-P and lateral films of cervical, thoracic and lumbar vertebral were negative for fracture or other osseous deformity.

Item H-5:

Once again the drogue gun piston was a problem during the descent. It was suspended at the level of 1st.Lt. (b) (6) helmet and continually struck his hardhat (Exemplified by several chip marks on the posterior section of the hardhat). It also swung in front of his face several times. He finally alleviated the problem by cutting the piston loose and dropping it. This can also become a problem by becoming entangled in the shroud lines.

Item H-31, H-32 and H-36:

The ejection was seen by several citizens of Borrego Springs, California. The AN/PRT-3 in 1st.Lt. (b) (6) aircraft was most effective as multiple shorebased facilities and airborne aircraft received the signal. The flight leader stated that the signal was so intensified that he could not transmit or Guard Channel. After descent 1st.Lt. (b) (6) was taken by civilian vehicle to a local airport and returned to NAS Miramar via military aircraft.

MEDICAL OFFICER'S REPORT OF A/C ACCIDENT, INCIDENT, OR GROUND ACCIDENT – PAGE 6
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SECTION I – PATHOLOGICAL FACTORS (Use A to denote ANTE MORTEM; P for POST MORTEM, when known and applicable.)

1. NAME OF INDIVIDUAL (Last, first, middle)	MODEL A/C
[redacted]	F8U-1

2. AGE	3. HEIGHT	4. WEIGHT	5. LOCATION AND DIRECTION FACING AT TIME OF ACCIDENT	6. INJURY CODE
29	[redacted] INCHES	[redacted]	Forward in Forward Cockpit	E

7. UNCONSCIOUSNESS: ☐ SHORT DURATION LITTLE SIGNIFICANCE ☐ OTHER (give time)
8. INTERNAL INJURIES (Non-fatal cases)

HEAD INJURIES
9. CEREBRAL CONCUSSION: ☐ MINOR ☐ SERIOUS ☐ CRITICAL ☐ FATAL
10. FACIAL INJURIES (R. P. S.)
11. INTRA-ORAL INJURIES
12. MINOR EYE INJURIES: ☐ RIGHT ☐ LEFT
13. MAJOR EYE INJURIES: ☐ RIGHT ☐ LEFT

14. TYPE OF FRACTURE	SKULL		VERTEBRAE (Specify No.)					SHOULDER GIRDLE	RIBS	PELVIS	UPPER ARM		LOWER ARM		HAND		UPPER LEG		LOWER LEG		FOOT	
	CRAN.	FACIAL	CERV.	HOR.	LUMBAR	SACRAL	COCCYX				R	L	R	L	R	L	R	L	R	L	R	L
SIMPLE																						
COMPOUND																						
COMMINUTED																						
DISLOCATION		JAW									SHOULDER		ELBOW		WRIST / HAND		HIP		KNEE		ANKLE / FOOT	

15. AMPUTATIONS/AVULSIONS (Start Parts)
16. LIST PRE-EXISTING PHYSICAL DEFECTS PRESENT AT TIME OF POST CRASH EXAMINATION

17. SOFT TISSUE INJURIES		LACERATIONS			CONTUSION/SPRAIN/STRAIN			ABRASIONS		
		MILD	MODERATE	SEVERE	MILD	MODERATE	SEVERE	MILD	MODERATE	SEVERE
HEAD (R. P. S.)	VENTRAL									
	DORSAL									
NECK										
THORAX	VENTRAL									
	DORSAL									
ABDOMEN	VENTRAL									
	DORSAL									
EXTREMITIES	UPPER									
	LOWER									

18. ☐ DROWNED
19. ☐ ASPHYXIATED
20. SHOCK: ☐ MILD ☐ MODERATE ☐ SEVERE
21. EXPOSURE: ☐ MILD ☐ MODERATE ☐ SEVERE

22. ☐ BURNS ☐ FROST BITE

DEGREE	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
AREA	HEAD (ventral	Dorsal)	TRUNK (ventral	Dorsal)	ARMS	LEGS			

23. EXTENT OF CARBONIZATION: ☐ NONE ☐ COMPLETE
ARE TISSUE SPECIMENS OBTAINABLE? ☐ YES ☐ NO

NOTE: Attach a detailed narrative account of injuries, cause, structures causing injury, magnitudes of force, and include whether ANTE- OR POST-MORTEM if determined. It is necessary to give as clear a picture of injury cause and sequence as possible.

24. ADMITTED TO SICK LIST? IF YES, GIVE DIAGNOSIS: ☐ YES ☒ NO
25. DIAGNOSIS NO. (NAVMED P-5016)
26. ESTIMATED STAY ON SICK LIST ____ DAYS
27. GROUNDED? IF YES GIVE REASON: ☐ YES ☒ NO
28. ESTIMATED DURATION ____ DAYS
29. PRIMARY CAUSE OF DEATH (Use Basic Diagnostic Nomenclature, NAVMED P-5016) NO. ____
30. SECONDARY CAUSE OF DEATH NO. ____
31. AUTOPSY PERFORMED? ☐ YES ☐ NO
32. PROTOCOL ☐ ATTACHED ☐ WILL BE FORWARDED
33. AUTOPSY CONDUCTED BY ☐ PATHOLOGIST ☐ FLIGHT SURGEON
IF FLIGHT SURGEON DOES AUTOPSY USE "AUTOPSY GUIDE FOR A/C ACCIDENT FATALITIES", AFIP-1957.

34. SPECIMEN	TEST PERFORMED	RESULTS	SPECIMEN	TEST PERFORMED	RESULTS
BLOOD: 1			TISSUE: (CNS)		
2			MUSCLE		
3			VISCERA		
URINE (?)	R&M	Negative	OTHER:		
G-I CONTENTS					

35. IF ULTRAVIOLET LIGHT OR OTHER SPECIALIZED INVESTIGATIVE PROCEDURES WERE USED AT THE MISHAP SITE OR AUTOPSY, LIST THEM IN THIS SPACE. FOR EACH ENTRY IN THIS SPACE A NARRATIVE ACCOUNT OF THEIR RESULTS AND INTERPRETATION WILL BE ATTACHED.

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OPNAV FORM 3750-8 (Rev. 5-58)
OPNAV REPORT 3750-7
See OPNAVINST. 3750.6C for instructions - SPECIAL HANDLING REQUIRED

SECTION A - IDENTIFICATION

1. FROM (Name and mailing address of activity)			2. MOR NUMBER
VF-124, USNAS, MIRAMAR 45, CALIFORNIA			2-62
(b) (6) (Signature of Medical Officer) LT MC USNR	DATE 14 Mar 62	(b) (6) (Signature of Appointing Authority) CDR USN	DATE 14 Mar 62

5. TYPE OF MISHAP	6. TIME AND ZONE	7. DATE	
[X] ACCIDENT [ ] GROUND ACCIDENT [ ] INCIDENT	1704 U	27 Feb 62	Lat. 33 deg. 16 min. N. Long 116 deg 22 min. W, Borrego Springs, Calif.

8. MODEL A/C	9. BUNO	11. NO. OF OCCUPANTS	12. TYPE ACCDT.	13. DAMAGE CODE	14. UNIT OPERATING A/C
F8U-2	146975	1	A1/G8	A	VF-124

15. INDIVIDUALS INVOLVED - USE ADDITIONAL SHEETS IF REQUIRED. NAME (Last, first and middle initials)	16. UNIT TO WHICH ATTACHED	17. RANK, RATE	18. FILE/SERV. NO DESIGNATOR	19. BILLET	20. BRANCH OF SERVICE	21. INJURY CODE	22. DISPO SITION
a. IN CONTROL OF A/C (b) (6)	VF-124	LTJG	(b) (6) /1310	Pilot	USN	E	E
b.							
c.							
d.							

23. CLARIFICATION OF ITEMS 15 TO 22 WHEN NECESSARY

24. MODEL OTHER A/C IF INVOLVED	25. BUNO	26. NO OF OCCUPANTS	27. UNIT OPERATING A/C	28. DAMAGE CODE	29. REPORT NO
F8U-1	145396	1	VF-124	A	3-62

30. DETAILED NARRATIVE ACCOUNT OF ACCIDENT *(Use additional 8 X 10½ plain sheets if required)*

See Attached Addendum

SECTION B - MEDICAL OFFICER'S QUESTIONNAIRE

YES	NO	DID THE FLIGHT SURGEON: *(If "NO" state reason in space below.)*	
X		1. VISIT THE SCENE OF THE MISHAP?	
X		2. PARTICIPATE FULLY IN THE FIELD INVESTIGATION?	
X		3. PARTICIPATE FULLY IN THE DELIBERATIONS OF THE A/C ACCIDENT BOARD?	

GIVE APPROXIMATE NUMBER OF HOURS SPENT BY THE FLIGHT SURGEON:	4. IN FIELD INVESTIGATION	5. IN BOARD DELIBERATIONS	6. IN PREPARATION OF THIS REPORT
	7	6	8

7. REPORT PREPARATION CHECK LIST
[X] ALL PARTS OF FORM COMPLETED [X] NARRATIVES [ ] PHOTOS [X] CONCLUSIONS AND RECOMMENDATIONS [X] REQUIRED COPIES FURNISHED

MEDICAL OFFICER'S REPORT OF A/C ACCIDENT, INCIDENT, OR GROUND ACCIDENT – PAGE 1
OPNAV FORM 3750-8 (Rev. 5-58) — See OPNAVINST. 3750.6C for instructions · SPECIAL HANDLING REQUIRED — OPNAV REPORT 3750-1

SECTION A - IDENTIFICATION

1. From (Name and mailing address of activity): VF-124, USNAS, MIRAMAR 45, CALIFORNIA
2. MOR Number: 2-62

3. (Signature of Medical Officer): [redacted] LT MC USNR — Date: 14 Mar 62
4. (Signature of Appointing Authority): [redacted] CDR USN — Date: 14 Mar 62

5. Type of Mishap	6. Time and Zone	7. Date	8. Location
[X] Accident [ ] Ground Accident [ ] Incident	1704 U	27 Feb 62	Lat 33 deg. 16 min. N. Long 116 deg 22 min. W, Borrego Springs, Calif.

9. Model A/C	10. BuNo	11. No. of Occupants	12. Type Accdt	13. Damage Code	14. Unit Operating A/C
F8U-2	146975	1	A1/G8	A	VF-124

15. Individuals Involved - Use additional sheets if required. Name (Last, first and middle initials)	16. Unit to which attached	17. Rank, Rate	18. File/Serv. No. Designator	19. Billet	20. Branch of Service	21. Injury Code	22. Disposition
a. In control of A/C: [redacted]	VF-124	LTJG	[redacted]/1310	Pilot	USN	E	E
b.							
c.							
d.							

23. Clarification of items 15-22 when necessary

24. Model Other A/C if involved	25. BuNo	26. No. of Occupants	27. Unit Operating A/C	28. Damage Code	29. Report No.
F8U-1	145396	1	VF-124	A	3-62

30. Detailed narrative account of accident (Use additional 8 X 10½ plain sheets if required)

See Attached Addendum

SECTION B - MEDICAL OFFICER'S QUESTIONNAIRE

YES	NO	DID THE FLIGHT SURGEON:	(If "NO" state reason in space below.)
X		1. VISIT THE SCENE OF THE MISHAP?	
X		2. PARTICIPATE FULLY IN THE FIELD INVESTIGATION?	
X		3. PARTICIPATE FULLY IN THE DELIBERATIONS OF THE A/C ACCIDENT BOARD?	

GIVE APPROXIMATE NUMBER OF HOURS SPENT BY THE FLIGHT SURGEON:	4. In field investigation	5. In board deliberations	6. In preparation of this report
	7	6	8

7. Report preparation check list: [X] All parts of form completed [X] Survivors narratives [ ] Photos [X] Conclusions and recommendations [X] Required copies furnished

ORIGINAL

ADDENDUM TO PAGE 1, ITEM 30 OF VF-124 MOR 3-62

On February 27, 1962 at approximately 1525 uniform time LTJG (b) (6) and 1/LT (b) (6) took off from NAS Miramar as number 2 and 3 men of a scheduled four plane formation training flight. It was the first formation hop for LTJG (b) (6) and the second formation hop for 1/LT (b) (6). Both men had sufficient nutrition and adequate rest in the 24 hours preceeding the accident. The flight was thoroughly briefed.

The flight progressed in a normal manner through "finger four", instrument parade, break up and rendezvous, and tactical wing maneuvers. At this point each pilot shot two touch and go landings at MCAAS Yuma, Arizona. LT (b) (6) the flight leader then directed the flight to make a running rendezvous enroute to Miramar via El Centro and LTJG (b) (6) joined on the starboard wing in parade. LT (b) (6) advised 1/LT (b) (6) that the rendezvous point would be on the 290° radial of El Centro at 30 miles. Due to the proximity of a restricted area the rendezvous point was changed to 40 miles and at that point a standard port orbit was set up and after 80° of turn the #4 man, 1/LT (b) (6) joined the flight. After approximately 180° of turn the #4 man sighted 1/LT (b) (6) and he responded with "Roger, have you". 1/LT (b) (6) passed under the formation to the inside of the turn and noted immediate difficulty with keeping the flight in sight due to the setting sun. He, therefore, began maneuvering back and forth from port to starboard behind the formation to avoid the sun's glare and close the formation from astern. The last time he moved across from port to starboard he began to slide out and behind the formation. In an attempt to recover he went into a 60° bank to port, but inadvertently continued the roll to an inverted position at 300 knots. 1/LT (b) (6) lost sight of all three aircraft at this time. He attempted recovery by pulling the throttle to idle, dropping the speed brakes and pulling the nose down. During this inverted maneuver 1/LT (b) (6) airplane collided with LTJG (b) (6) airplane. The forward portion of (b) (6) 's fuselage struck the starboard tip of (b) (6) wing (Photo #1) then (b) (6) 's starboard wing tip dug into the vertical fin of (b) (6) 's aircraft and scraped along the vertical fin (Photo #2) before striking the starboard wing of (b) (6) airplane. During this sequence of events, the entire wing of (b) (6) aircraft was separated from the fuselage and the starboard wing of (b) (6) aircraft was torn off. (The concertration of damage on the starboard side of both aircraft establishes the fact that 1/LT (b) (6) was inverted at the moment of collision)

After the collision LTJG (b) (6) felt his aircraft pitch nose down and noting no response from the controls he elected to eject. At the same time 1/LT (b) (6) felt his aircraft begin a spinning motion and he attempted anti-spin control procedures when he heard the flight leader transmit "Get out of it! Get out of it now!" 1/LT (b) (6) experienced some difficulty in pulling the face curtain all the way and finally lunged forward in the seat with the total force of the upper half of his body.

The ejections and descents proceeded normally and both pilots landed in the desert on the outskirts of Borrego Springs, California. They were picked up by civilians and taken to Borrego Springs County Airport and then flown to NAS Miramar by Coast Guard UF. Immediate examinations at the NAS Dispensary Miramar were negative.

MEDICAL OFFICER'S REPORT OF A/C ACCIDENT, INCIDENT, OR GROUND ACCIDENT—Page 2

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SECTION C—PHYSIOLOGICAL, HUMAN ENGINEERING, DESIGN, SOCIO-PSYCHOLOGICAL, AND TRAINING FACTORS WHICH CONTRIBUTED IN SOME DEGREE TO THIS A/C ACCIDENT, INCIDENT, OR GROUND ACCIDENT

NAME OF INDIVIDUAL (Last, first, middle): (b) (6) [redacted] — MODEL A/C: F8U-2

Check E-Established, S-Suspected, or P-Present for each factor selected. Additional 8X10½ plain sheets will be used for the supporting account of items checked below. Identify each statement with the factor and section identification (e.g., C1, C2, etc.). Attach all sheets pertaining to these factors to this form upon completion.

E	S	P	✓ FACTORS
			PHYSIOLOGICAL:
			1. Physically incapacitated in flight
			2. "G" forces
			3. Environmental stress - External
			4. - Internal
			5. Dysbarism/explosive decompression
			6. Diet
			7. Fatigue
			8. Hypoxia
			9. Related illness
			10. Vertigo/Disorientation/Illusions
			11. Hyperventilation
			12. Drugs
			13. Physical state
			14. OTHER:
			HUMAN ENGINEERING AND DESIGN:
			15. Personal equipment
			16. Displays and/or controls
			17. Work arrangement
			18. Working environment
			19. Habit interference
			20. OTHER:
			SOCIO-PSYCHOLOGICAL: *(Emotional stress from non-duty sources)*
			21. Pregnancy
			22. Illness or death
			23. Arguments
			24. Elated/Depressed state
			25. Personal habits - Drinking
			26. - Sex
			27. - Gambling
			28. - Debts

E	S	P	✓ FACTORS
			SOCIO-PSYCHOLOGICAL: *(Emotional stress from duty sources)*
			29. Expeditings/Delays
			30. Weather
			31. Mechanical Problems
			32. Social and working relationships
			33. Personal comfort
			34. Regulations
			35. Facilities
			36. Navigation
			37. Duty assignment
			38. Personality traits
			NON-STRESS FACTORS:
			39. Faulty attention
			40. Poor judgement
			41. Forgetfulness
			42. OTHER SOCIO-PSYCHOLOGICAL FACTORS
			TRAINING FACTORS:
			43. Physiological training
			44. Emergency Procedures training
			45. Survival and rescue training
			46. Refresher training
			47. Transition training
			48. OTHER:

SECTION D — AIR CREW DATA *(fill in where applicable)*

1. Flight time past 30 days	12.1	7. Total time in model	9.5
2. Flight time last 24 hours	3.3	8. Number of days grounded last month, give reason	None
3. Number of flights in last 24 hours	2		
4. Time at controls this flight	1.5	9. Number of and dates of previous accidents	None
5. Number of hours duty last 24 hours	None		
6. Total flight time	353.3		

SECTION E — CONTRIBUTING FACTORS AND THEIR ANALYSIS *(As contained from Part I, Sec. D and Part VIII of the ARR)*

NOTE: Fill in this section only on that set of forms prepared for FIRST individual listed in Section A, i.a. 15(a). Attach additional sheets as necessary.

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SECTION F - SAFETY, PERSONAL, AND SURVIVAL EQUIPMENT
Prepare a narrative account of damaged or failed items. Identify each item discussed (e.g., F1, F2, etc.)

NAME OF INDIVIDUAL (Last, first, middle): (b) (6) | MODEL A/C: F8U-2

GENERAL DESCRIPTION OF EQUIPMENT	AVAILABLE YES	AVAILABLE NO	SPECIFIC MODEL OR TYPE	UTILIZED YES	UTILIZED NO	FAILED YES	FAILED NO
1. Shoulder harness	X		Martin Baker F-5	X			X
2. Lap belt	X		Martin Baker F-5	X			X
3. Inertia reel	X		Inertia Harness Reel Assembly				
4. G-Suit	X		Z-3 Cutaway	X			X
5. Pressure suit-full or partial							
6. Exposure suit							
7. Flight suit (Other than above)	X		Summer Orange	X			X
8. Helmet	X		APH-5	X			X
9. Goggles/Eyeshield							
10. Shoes	X		Flight(Field)	X			X
11. Gloves	X		Leather light	X			X
12. Life vest	X		Mark III C		X		
13. Life raft	X		PK-2, Hispeed Container		X		
14. OTHER:							
15. SIGNAL DEVICE - Flare (Night)	X		Day and Night		X		
16. - Flare (Day)	X		Signal Mod C		X		
17. - Dye marker	X		Dye Marker		X		
18. - Radio	X		ANPRC3 Beacon		X		
19. - Flashlight		X					
20. - Mirror	X		Survival Signal		X		
21. OTHER:							
22. SURVIVAL GEAR - Knife	X		Survival		X		
23. - First aid kit	X		PSK-2		X		
24. - Shelter							
25. - Food							
26. OTHER:							
27. RESCUE - Vehicle	X		Forest Patrol Truck	X			X
28. - Sling, Net, Stretcher							
29. OTHER:							

DESCRIPTION OF DAMAGE TO EQUIPMENT

No equipment damaged. Knee board lost during ejection.

SECTION G - DETAILED EQUIPMENT QUESTIONNAIRE

OXYGEN EQUIPMENT

1. MASK - MODEL OR TYPE: A-13-A
2. MODIFICATIONS, IF ANY: None (1)
3. REGULATOR - MODEL OR TYPE: Firewell 2846 (3)
4. MODIFICATIONS, IF ANY: None
5. PREFLIGHTED BY USER? [X] YES [ ] NO
6. IF NO, WHY NOT:
7. LIST DISCREPANCIES NOTED BY PREFLIGHT CHECK:
8. OXYGEN SUPPLY: PRIOR TO FLIGHT 5.0 LITERS (Liquid) ____ P.S.I. (Gas); TIME OF ACCIDENT 5.5 LITERS (Liquid) ____ P.S.I. (Gas)
9. WAS OXYGEN IN USE AT TIME OF ACCDT. [X] YES [ ] NO
10. IF YES, WAS SELECTOR SETTING [X] 100% [ ] NORMAL
11. WAS ALL OXYGEN EQUIPMENT NECESSARY FOR THIS FLIGHT AVAILABLE? IF NO, LIST ITEMS AND REASON WHY. [X] YES [ ] NO
12. WAS OXYGEN MASK REMOVED AT ANY TIME IN FLIGHT? IF YES, GIVE DURATION AND REASON. [X] NO [ ] YES

RELEASE DEVICES

13. TYPE CANOPY RELEASE DEVICE: Martin Baker F-5 (1)
14. TYPE HARNESS RELEASE DEVICE: Martin Baker F-5 ( )
15. WHEN WERE RELEASE DEVICES ACTIVATED? During ejection sequence (2)
16. WERE DIFFICULTIES ENCOUNTERED WITH RELEASE DEVICES? IF YES, STATE DIFFICULTIES, WHEN ENCOUNTERED AND CAUSE. [ ] YES [X] NO
17. WERE DIFFICULTIES ENCOUNTERED AFTER ACTIVATING RELEASE DEVICES? IF YES, STATE DIFFICULTIES, WHEN ENCOUNTERED AND CAUSE. [ ] YES [X] NO
18. WAS LIFE VEST INFLATED PRIOR TO ACTIVATING RELEASE DEVICES? IF YES, WHAT DIFFICULTIES DID THIS PRODUCE? [ ] YES [X] NO

(Continued on OPNAV FORM 3750-8C)

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SECTION G - DETAILED EQUIPMENT QUESTIONNAIRE (Continued)

(b) (6)

F8U-2

RESTRAINT HARNESS

18. INTEGRATED HARNESS SYSTEM, MODEL/TYPE: Martin Baker F-5 (1)
19. INTEGRATED? [X] FULL [ ] PARTIAL
21. MODIFICATIONS, IF ANY STATE REASON:
22. DID INTEGRATED HARNESS FIT PROPERLY? IF NO, LIST DISCREPANCIES IN FIT AND GIVE REASONS THEREFOR: [ ] NO [X] YES
23. INTEGRATED HARNESS FITTING WAS CONDUCTED BY: [ ] WEARER [ ] FLIGHT SURGEON [X] PARACHUTE RIGGER [ ] AVIATION EQUIPMENT OFFICER [ ] OTHER
24. IF SHOULDER HARNESS WAS USED, WAS IT: [X] LOCKED [ ] UNLOCKED [ ] TIGHT [ ] SLACK [ ] OTHER CONDITION

HELMET

25. TYPE HELMET: APH-5
26. LIST PRESCRIBED MODIFICATIONS: Chin Strap, Nape Strap and Hardman Fittings (4)
27. OTHER MODIFICATIONS AND REASON FOR THEM:
28. DID HELMET FIT PROPERLY? IF NO, GIVE REASON: [X] YES [ ] NO
29. HELMET FITTING WAS CONDUCTED BY: [ ] WEARER [ ] FLIGHT SURGEON [X] PARACHUTE RIGGER [ ] AVIATION EQUIPMENT OFFICER [ ] OTHER

PARACHUTE

30. TYPE CHUTE: Martin Baker F-5 (3)
31. LAST PACKING DATE: 19 Feb 62
32. MODEL/TYPE BAILOUT OXYGEN: Martin Baker F-5 (2)
33. AUTOMATIC RIPCORD, IF INSTALLED (Model and type): [ ] NONE Martin Baker F-5 (3)
34. DID AUTOMATIC RIPCORD FAIL? IF YES, WHY? [X] NO
35. WAS RIPCORD ACTIVATION: [ ] MANUAL [X] AUTOMATIC
36. IF MANUALLY ACTIVATED STATE REASON AND ANY DIFFICULTIES ENCOUNTERED:
37. DID CHUTE OPEN IMMEDIATELY? IF NO, GIVE REASON: [ ] YES [X] NO Barostat set for 10,000 to 13,000 feet (1)
38. ALTITUDE THAT CHUTE OPENED: Between 10,000 & 13,000 FEET
39. OPENING SHOCK WAS: [ ] SLIGHT [ ] MODERATE [X] SEVERE
40. BODY ATTITUDE AT OPENING: Erect with lateral spin
41. CONDITION OF CHUTE AFTER OPENING: excellent
42. CHUTE OSCILLATION PRESENT: [ ] NONE [X] SLIGHT [ ] MODERATE [ ] SEVERE
43. IF OSCILLATION WAS PRESENT, HOW WAS IT STOPPED? not stopped
44. WEATHER CONDITIONS DURING DESCENT (List in sequence): Clear with unlimited visibility
45. TOPOGRAPHY OF LANDING SITE: desert (2)
46. WAS BAILOUT OXYGEN CONNECTED? [X] BEFORE EXIT [ ] AFTER EXIT [ ] NO [ ] N.A.
47. WAS BAILOUT OXYGEN USED? IF NOT, WHY? [X] YES [ ] NO
48. WHEN WAS IT ACTIVATED? [ ] BEFORE EXIT [X] AFTER EXIT (3)
49. GIVE DIFFICULTIES ENCOUNTERED WITH BAILOUT OXYGEN AND THEIR CAUSE, IF ANY:
50. WAS CHUTE HARNESS: [ ] TIGHT [X] SNUG [ ] LOOSE
51. WAS A SITTING POSITION IN SLING OBTAINED DURING DESCENT? IF NOT, WHY? [ ] NO [X] YES [ ] NOT ATTEMPTED ( )
52. SEAT CUSHION IF PROVIDED (Model/Type): [ ] NONE MB-F5 (5)
53. WAS PARACHUTE LANYARD CONNECTED TO LIFE VEST D RING? IF NOT, WHY? [X] NO [ ] YES
54. LIST TYPE OF PARACHUTE TRAINING COMPLETED BY THIS INDIVIDUAL: [ ] NONE Preflight , ejection seat and sling drill , Feb 1962
55. IF ATTEMPT WAS MADE TO RELEASE PARACHUTE DURING DESCENT, WAS RELEASE ACTIVATED SUCCESSFULLY? [ ] YES [ ] NO
56. IF NO, GIVE REASON:
57. IF A SUIT, EXPOSURE SUIT, FULL OR PARTIAL PRESSURE SUIT WAS WORN, DID IT FIT PROPERLY? IF NOT, LIST DISCREPANCIES IN FIT AND GIVE REASONS THEREFOR: [X] YES [ ] NO
58. WAS SUIT EQUIPPED WITH A SPRING-LOADED DISCONNECT ADAPTER? IF NO, GIVE REASON: [X] YES [ ] NO

OTHER

59. LIST ALL ITEMS OF NON-STANDARD CLOTHING OR SURVIVAL EQUIPMENT UTILIZED:
60. WAS ANY ITEM OF EQUIPMENT LOST? IF YES STATE ITEM, WHEN LOST, AND REASON FOR LOSS: [X] NO [ ] YES (3)
61. WAS ANY ITEM OF EQUIPMENT DISCARDED? IF YES, STATE ITEM, WHEN DISCARDED, AND REASON FOR DISCARD: [X] NO [ ] YES

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MEDICAL OFFICER'S REPORT OF A/C ACCIDENT, INCIDENT, OR GROUND ACCIDENT – PAGE 5

OPNAV FORM 3750-8D (REV. 9-58) OPNAV REPORT 3750-7

SECTION H - EMERGENCY EXIT FROM A/C AND SURVIVAL FACTORS

NAME OF INDIVIDUAL (Last, first, middle): (b) (6) [redacted]

MODEL A/C: F8U-2

S	E	S-SUSPECTED, E-ESTABLISHED	REMARKS
	X	1. EJECTION - Attempted	
(S)	X	2. - Accomplished	
(S)	X	3. - Through canopy	
YES	NO	EJECTION DIFFICULTIES ENCOUNTERED	IF YES, EXPLAIN DIFFICULTIES
	X	4. - Prior to	
	X	5. - During	
	X	6. - Subsequent to	
		7. Give type and model of seat used	Martin Baker F5
		8. BAILOUT - Attempted	
		- Accomplished	

9. ALTITUDE AT TIME OF EXIT: ABOVE SEA LEVEL 27M (A) ABOVE TOPOGRAPHY (A) 26.5 M

10. ATTITUDE OR MANEUVER OF A/C AT EXIT OR IMPACT: 60 deg nose down, upright wing missing

11. AIRSPEED: 300 kts

12. COLLISION OF A/C WITH	13. CONTROLLED	14. POWER	15. WHEELS	16. FLAPS
(S) GROUND ☐ WATER	☐ YES (S) NO ☐ UNKNOWN	(S) ON ☐ OFF	(S) UP ☐ DOWN	☐ FULL (S) UP ☐ PARTIAL

17. CANOPY POSITION AT EXIT OR IMPACT	18. SEA STATE	19. AIR TEMP.	20. WATER TEMP.	21. A/C FLOATED	22. TIME IN WATER	23. TIME IN RAFT
☐ OPEN ☐ CLOSED (S) JETTISONED		52 °F	52 °F	SEC.		

BAIL OUT OR COLLISION WITH WATER OR GROUND

24. EXIT USED

25. IS THIS THE RECOMMENDED EXIT? IF NO STATE REASON FOR CHOICE. ☐ YES ☐ NO

26. DIFFICULTIES WITH THIS EXIT WERE ☐ IN REACHING ☐ IN OPENING ☐ IN EXITING

27. STATE NATURE OF DIFFICULTY

28. BODY POSITION DURING EXIT

29. LIST OTHER FACTORS NOT INDICATED ABOVE WHICH AFFECTED EXIT FROM A/C

SURVIVAL FACTORS: Check factors below which are appropriate for this accident. Prepare a detailed narrative account of the factors checked below and attach to this form. Identify each item discussed by item number (e.g., H30, H31, etc.)

COMMUNICATIONS:		**MAINTAINING BODY TEMPERATURE:**	
(X)	30. Communicated position prior to mishap		50. Items used as shelter
X	31. Witnesses at scene		51. Items used as clothing
	32. Electronic signal devices		52. Fire
	33. Visual signal devices		53. OTHER:
	34. Auditory signal devices	**ENVIRONMENTAL HAZARDS:**	
	35. OTHER:		54. Exposure to natural forces
TRAVEL:			55. Exposure to dangerous animals and plants
X	36. LAND		56. Unfriendly native population
	37. WATER		57. OTHER:
SHELTER:		**MORALE:**	
	38. Life raft		58. Isolation
	39. Parachute		59. Psychological shock
	40. A/C structure		60. Lack of motivation to survive
	41. Natural shelter		61. Boredom
	42. Man-made shelter		62. Rationing, activities, and group coordination
	43. OTHER:		63. OTHER:
WATER SOURCE:		**FOOD SOURCE:**	
	44. Distiller kit, converter or solar still		64. Prepared survival rations
	45. Rain, dew, snow, ice, etc.		65. Animals/plants
	46. Processed beverages		66. OTHER:
	47. Canteen, thermos, water breaker, etc.	**SURVIVAL TRAINING RECEIVED PRIOR TO MISHAP:**	
	48. Streams, ponds, wells, etc.		67.
	49. OTHER:		

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ADDENDUM to Page #5, Section H of MOR 2-62 of VF-124

Item #H-31 and H-36

The ejected pilots were seen by several citizens of Borrego Springs, California. As a result LTJG (b) (6) was picked up immediately after he descended. He contacted 1stLT (b) (6) and was taken by private vehicle to a nearby civilian airport where he was picked up by a Coast Guard UF and returned to NAS MIRAMAR.

MEDICAL OFFICER'S REPORT OF A/C ACCIDENT, INCIDENT, OR GROUND ACCIDENT – PAGE 6
OPNAV FORM 3750-6E (Rev. 5-58)

OPNAV REPORT 3750-7

SECTION 1 - PATHOLOGICAL FACTORS (Use A to denote ANTE MORTEM; P for POST MORTEM, when known and applicable.)

1. NAME OF INDIVIDUAL (Last, first, middle)	MODEL A/C
[redacted] (b) (6)	F8U-2

2. AGE	3. HEIGHT	4. WEIGHT	5. LOCATION AND DIRECTION FACING AT TIME OF ACCIDENT	6. INJURY CODE
24	[redacted] INCHES	[redacted]	Forward in forward cockpit	E

7. UNCONSCIOUSNESS: ☐ SHORT DURATION LITTLE SIGNIFICANCE ☐ OTHER (give time)

8. INTERNAL INJURIES (Non-fatal only)

HEAD INJURIES
9. CEREBRAL CONCUSSION: ☐ MINOR ☐ SERIOUS ☐ CRITICAL ☐ FATAL
10. FACIAL INJURIES (U. F. C.)
11. INTRA-ORAL INJURIES
12. MINOR EYE INJURIES: ☐ RIGHT ☐ LEFT
13. MAJOR EYE INJURIES: ☐ RIGHT ☐ LEFT

14. TYPE OF FRACTURE	SKULL CRAN.	SKULL FACIAL	VERTEBRAE CERV.	DOR.	LUMBAR	SACRAL	COCCYX	SHOULDER GIRDLE	RIBS	PELVIS	UPPER ARM R	L	LOWER ARM R	L	HAND R	L	UPPER LEG R	L	LOWER LEG R	L	FOOT R	L
SIMPLE																						
COMPOUND																						
COMMINUTED																						

DISLOCATION: JAW / SHOULDER / ELBOW / WRIST / HAND / HIP / KNEE / ANKLE / FOOT

15. AMPUTATIONS/AVULSIONS (State Parts)

16. LIST PRE-EXISTING PHYSICAL DEFECTS PRESENT AT TIME OF POST CRASH EXAMINATION

17. SOFT TISSUE INJURIES		LACERATIONS MILD	MODERATE	SEVERE	CONTUSION/SPRAIN/STRAIN MILD	MODERATE	SEVERE	ABRASIONS MILD	MODERATE	SEVERE
HEAD (U. F. C.)	VENTRAL									
	DORSAL									
NECK										
THORAX	VENTRAL									
	DORSAL									
ABDOMEN	VENTRAL									
	DORSAL									
EXTREMITIES	UPPER									
	LOWER									

18. ☐ DROWNED
19. ☐ ASPHYXIATED
20. SHOCK: ☐ MILD ☐ MODERATE ☐ SEVERE
21. EXPOSURE: ☐ MILD ☐ MODERATE ☐ SEVERE

22. ☐ BURNS ☐ FROST BITE — DEGREES: 1ST 2ND 3RD / 1ST 2ND 3RD / 1ST 2ND 3RD — AREA: HEAD (ventral) (Dorsal) TRUNK (ventral) (Dorsal) ARMS LEGS

23. EXTENT OF CARBONIZATION: ☐ NONE ☐ COMPLETE
ARE TISSUE SPECIMENS OBTAINABLE? ☐ YES ☐ NO

NOTE: Attach a detailed narrative account of injuries, cause, structures causing injury, magnitudes of force, and include whether ANTE- OR POST-MORTEM if determined. It is necessary to give as clear a picture of injury cause and sequence as possible.

24. ADMITTED TO SICK LIST? IF YES, GIVE DIAGNOSIS: ☐ YES ☒ NO
25. DIAGNOSIS NO. (NAVMED P-)
26. ESTIMATED STAY ON SICK LIST: DAYS
27. GROUNDED? IF YES GIVE REASON: ☐ YES ☒ NO
28. ESTIMATED DURATION: DAYS

29. PRIMARY CAUSE OF DEATH (Use Basic Diagnostic Nomenclature, NAVMED P-) NO.
30. SECONDARY CAUSE OF DEATH NO.

31. AUTOPSY PERFORMED? ☐ YES ☐ NO
32. PROTOCOL ☐ ATTACHED ☐ WILL BE FORWARDED
33. AUTOPSY CONDUCTED BY ☐ PATHOLOGIST ☐ FLIGHT SURGEON
IF FLIGHT SURGEON DOES AUTOPSY USE "AUTOPSY GUIDE FOR A/C ACCIDENT FATALITIES", AFIP 1957.

34. SPECIMEN		TEST PERFORMED	RESULTS	SPECIMEN	TEST PERFORMED	RESULTS
BLOOD:	1			TISSUE: LIVER		
	2			MUSCLE		
	3			VISCERA		
URINE	(2)	NaN	Negative	OTHER:		
G-I CONTENTS						

35. IF ULTRAVIOLET LIGHT OR OTHER SPECIALIZED INVESTIGATIVE PROCEDURES WERE USED AT THE MISHAP SITE OR AUTOPSY, LIST THEM IN THIS SPACE. FOR EACH ENTRY IN THIS SPACE A NARRATIVE ACCOUNT OF THEIR RESULTS AND INTERPRETATION WILL BE ATTACHED.

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CONCLUSIONS AND RECOMMENDATIONS to VF-124 MCR 2-62

LTJG (b) (6) was in positive control of his aircraft at the time of collision and did not contribute to the accident other than passively as an innocent victim of location. He ejected wisely and the entire ejection, descent and recovery occurred without error or malfunction.

CONCLUSIONS AND RECOMMENDATIONS to VF-124 MCR 3-62

CONCLUSIONS:

1. This accident was due to pilot factor. 1st.Lt. (b) (6) fixed his attention on the formation as he began to lose the proper position he had never gained. Due to sole and dedicated intent to join the formation he overcontrolled his aircraft to an inverted position with an excessively rapid closure rate and resultant midair collision. He thereby violated a continually taught principle in formation flying. Relative motion on a formation must be ceased at a safe distance followed by slow and careful movement into position.

2. Sun glare was a contributing factor in that 1st.Lt. (b) (6) radical manipulation was precipitated as a result of attempts to avoid it.

3. 1st.Lt. (b) (6) experience as an FSU pilot was minimal and may have played a small part in his lack of judgement and faulty attention.

4. The drogue gun piston hangs down to the level of the pilot's head on many descents following ejection and constitutes a hazard to the pilot's head and also in that it may become entangled in the shroud lines.

RECOMMENDATIONS:

1. The absolute necessity of slow and deliberate movement in and about formation flights especially with regards to closing.

2. That the ANPRT-3 be actuated on ejection vice seat separation to gain extension of transmission time.

3. Consultation with the local Martin-Baker representative reveals no drogue assembly change which will eliminate the drogue piston problem during descent which is feasible.

ENCL 6 - SHOWING FIRE DAMAGE TO THE FUSELAGE OF NJ-433

ENCL: 7 - SHOWING FIRE DAMAGE TO THE FUSELAGE OF NJ-406

ENCL: 8 - SHOWING PAINT MARKS ON THE VERTICAL FIN OF NJ-408

ENCL: 9 - SHOWING PAINT MARKS AND COLLISION DAMAGE TO THE DORSAL FIN OF KJ-408

EXCL: 10 - SHOWING COLLISION DAMAGE TO THE VERTICAL FIN OF NJ-408

ENCL: 11 - SHOWING ENTIRE WING OF NJ-4CS, THE COLLISION DAMAGE TO THE STARBOARD TIP, AND THE GROUND SCAR. WING AS SHOWN, IS INVERTED

BUCL: 12 - SHOWING THE PORT WING OF KJ-433

BELL 13 - SHOWING REVERSED STARBOARD WING OF XS-1-33 AT ITS GROUND IMPACT POINT

ENCL: 14 - SHOWING PAINT MARKS ON STARBOARD WING TIP OF NJ-433

FIGURE 15 - SHOWING BROKEN STARBOARD WING PIVOT FITTING OF NJ-402

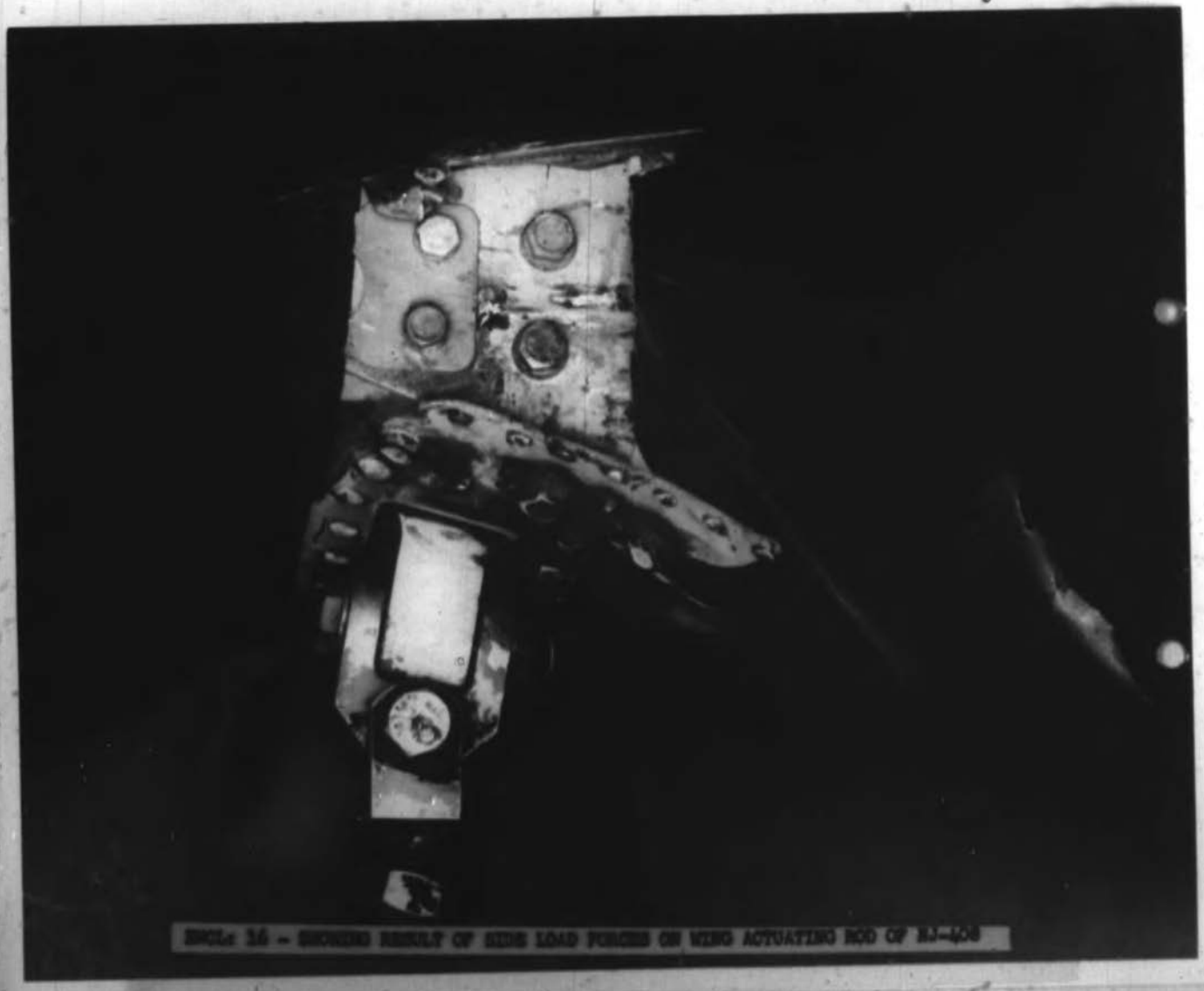


FIGURE 16 - SHOWING RESULT OF SIDE LOAD FORCES ON WING ACTUATING ROD OF XA-40B


NJ-408
NJ-433
NAVY
NAVY

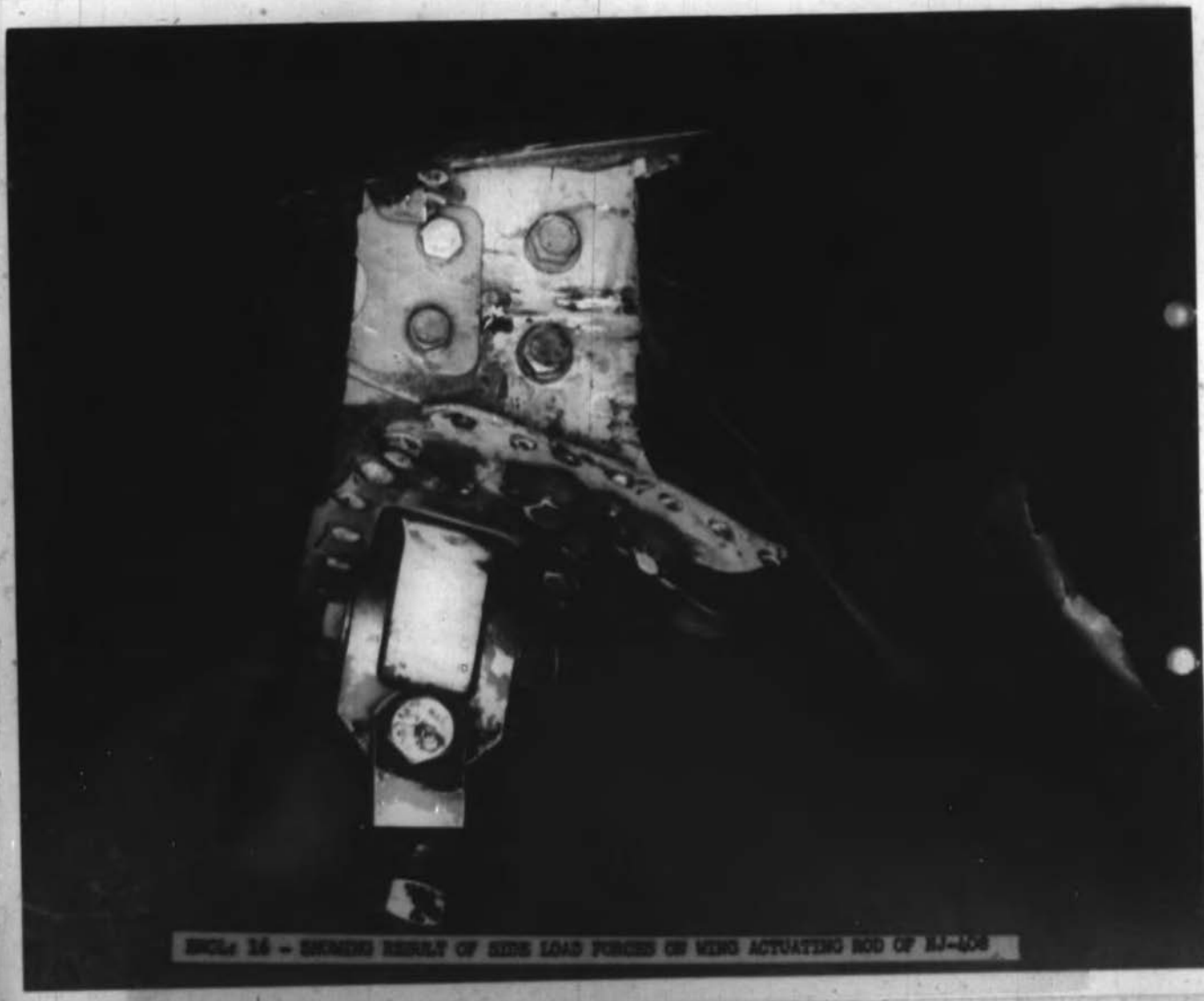
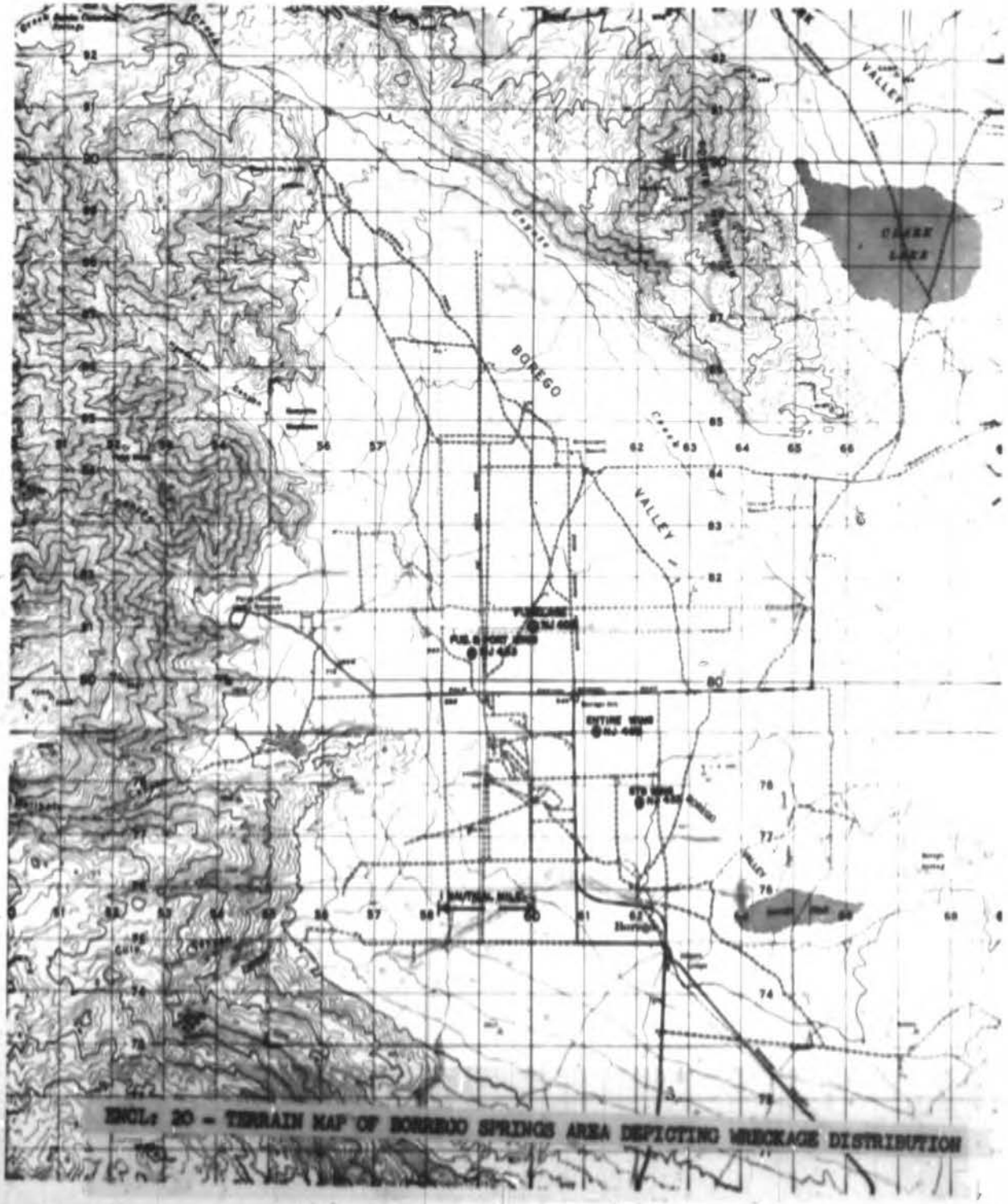


FIGURE 16 - SHOWING RESULT OF SIDE LOAD FORCES ON WING ACTUATING ROD OF XA-38

FIGURE 18 - PHOTO DEPICTING IMPACT OF STARBOARD WING OF NJ-433 WITH VERTICAL FIN OF NJ-408

ENCL: 19 - MODELS DEPICTING THE FINAL AND DISABLING IMPACT OF STARBOARD WING OF NJ-433 WITH PORT WING OF NJ-408



ENCL: 20 - TERRAIN MAP OF BORREGO SPRINGS AREA DEPICTING WRECKAGE DISTRIBUTION